550E
Crawler Tractor

Parts Catalog

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CASE
CONSTRUCTION

GENERAL INFORMATION

1. Whenever the terms left and right are used, it should be understood to mean from a position facing in direction of travel.

2. Throughout this manual you may find common hardware not illustrated, but listed in the description column. The service part immediately preceding a hardware listing is the part using these particular items for mounting purposes. This hardware is not included with the service part or assembly when ordered as a replacement.

3. The illustrations show typical assemblies plus individual parts but in all cases may not show the exact shape or detail of parts required. However, the purpose for the illustrations is to identify parts performing like functions. Whenever possible illustrations are located at the beginning of each section or immediately adjacent to the applicable text.

4. CNH America LLC is continually striving to improve its products. We must, therefore, reserve the right to make improvements or changes when it becomes practical and possible to do so, without incurring any obligation to make changes or additions to the equipment sold previously.

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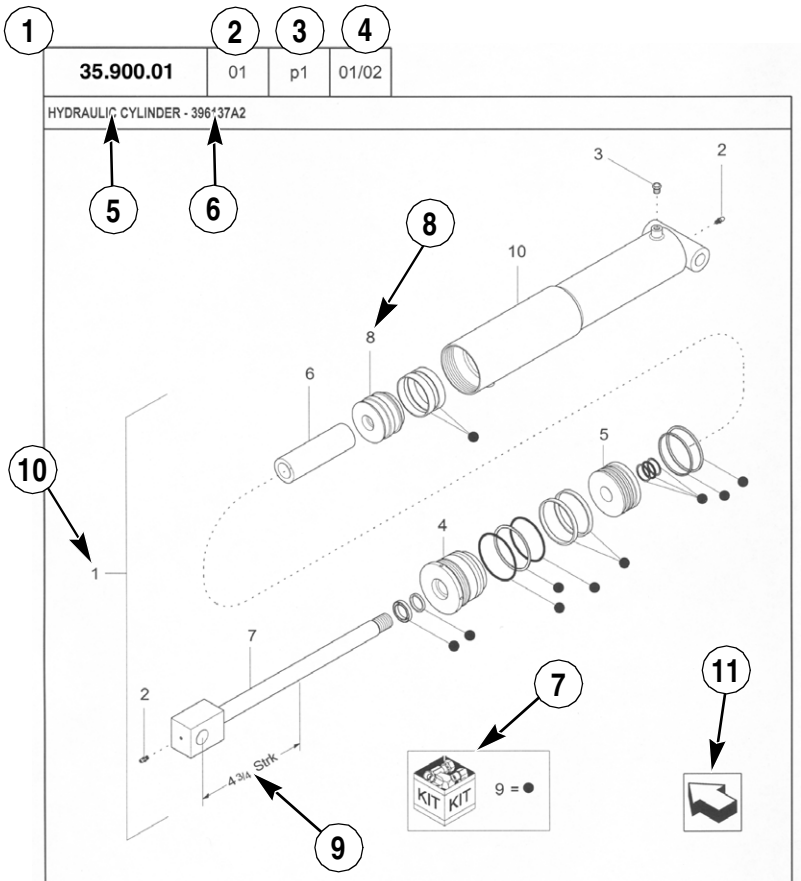

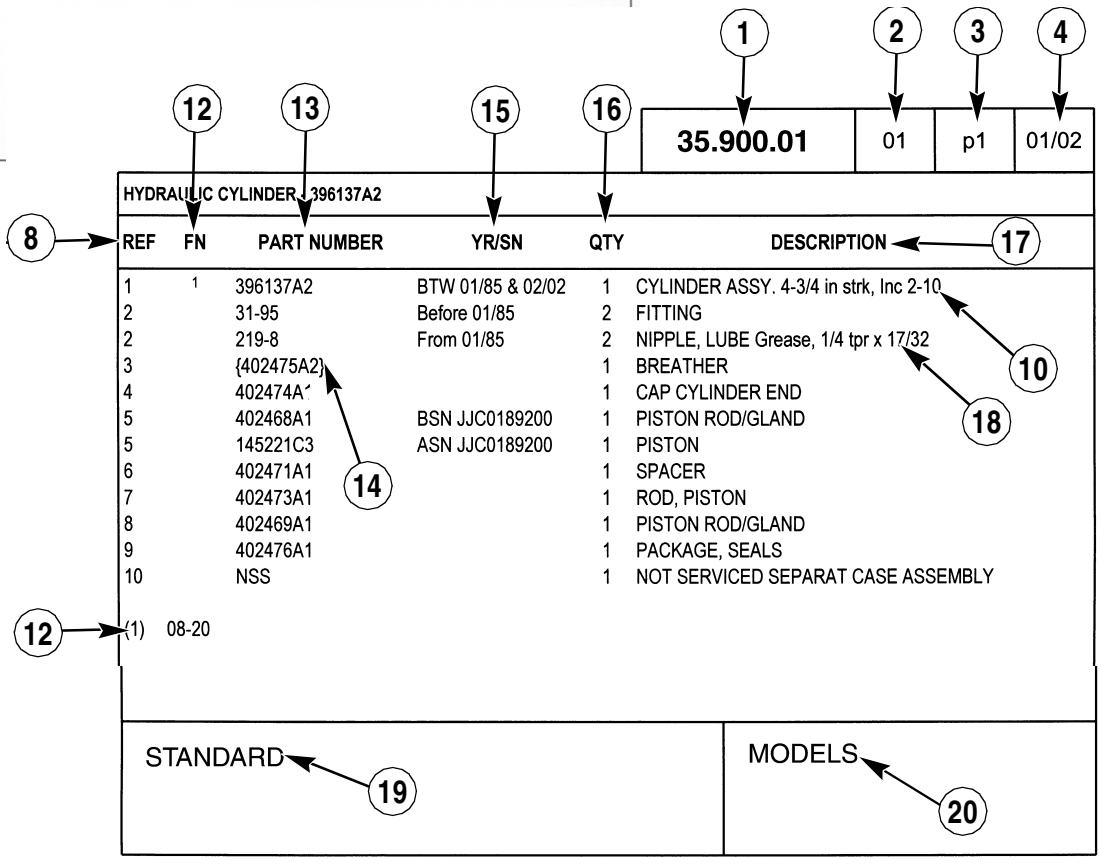

How to Use Your Parts Catalog

1. Figure Number
2. Sequence code within the Figure Number
3. Page number within the Sequence Code
4. Date of Printing (month / year)
5. Figure Description
6. General information regarding the figure
7. Parts supplied in repair kits per symbol reference
8. Figure call-out of the part number (REF)
9. Technical Specifications relating to the part indicated
10. Figure call-out includes bracketed items, the included items may also be listed in the additional description area
11. Orientation - Arrow indicates front of the machine
12. Footnote - Additional information relating to the part number. In this example, 08-20 equals another figure that this part is shown on.
13. Part Number
    NSS = Non-serviced parts
    Bracketed numbers = not available as service parts in this market
14. Not Available as service part in this market
15. YR/SN
    Year
    Before 01/85 = Part valid for production January 1985 and before
    From 01/85 = Part valid for production from January 1985 and after
    BTW 01/85 & 02/02 = Part valid for machines produced between January 1985 and February 2002.

    Serial Number (P.I.N.)
    BSN JJC0268800 = Part valid for serial number JJC0268800 and below
    ASN JJC0268800 = Part valid for serial number JJC0268800 and above
    BTW JJC0178000 & JJC0179000 = Part valid for serial numbers between JJC0178000 & JJC0179000
16. Total Quantity of the Part referred to in the page. The quantity can be replaced by the following indications:
    AR = quantity as required
    X = as required
17. Part Description
18. Additional description of the part to help confirm identification
19. Figure Notes
20. Model Number(s)

Explanation of Abbreviations

Abbreviation	Meaning
adj	adjustable
amp	ampere
AR	As required
ASN	Serial number and after / P.I.N. and after
barb	barb
blkhd	bulkhead
boss	boss
BSN	before serial number / before P.I.N
BTW	between
cc	cubic centimetre
chain	chain
cl	class
cp pt	cup point
CRS	Chrome Alloy Steel
CST	Carbon Steel
cu yd	cubic yard
deg	degree
dia	diameter
dr type	drive type
dry	dry
fc	face
fc sl	face seal
fem	female
fem PT	female pipe thread
fl	flare
ft	feet (or foot)
gal	gallon(s)
gr	grade
hd	head
hp	horsepower
ID	inside diameter

Abbreviation	Meaning
in	inch(es)
Inc.	includes
inv fl	inverted flare
K	kilo
kg	kilogram
L	litre
lb	pound(s)
lg	long
LH	left hand
LH thd	left hand thread
links	links
M	(prefix) metric thread size
m	metre
male	male
mm	millimetre
NF	National Fine
No.	number
NS	National Super Fine
OD	outside diameter
ohm	electrical unit of resistance
Or	O-ring
orifice	orifice
P	pitch
piece	piece
psi	pounds per square inch
PT	pipe thread
rd	round
rd holes	round holes
RH	right hand
RH thd	right hand thread
rpm	revolutions per minute

Explanation of Abbreviations

Abbreviation	Meaning
sl	self locking
slat	slat
spool	spool
sq	square
SST	Stainless Steel
st	self tapping
stem	stem
strk	stroke
sw	swivel
T	teeth
Teflon	Teflon
thin	thin
thk	thick
tpr	taper
tube	tube
type	type
V	volt(s)
W	watt(s)
way	way
wide	wide
X	as required
yd	yard

Dimensions

Metric and U.S. hardware dimensions do not show the numeric designations of standard coarse threads. A number following a semi colon (;) is the class or grade of hardware. A comma (,) represents the decimal point (.) used in U.S. dimensions.

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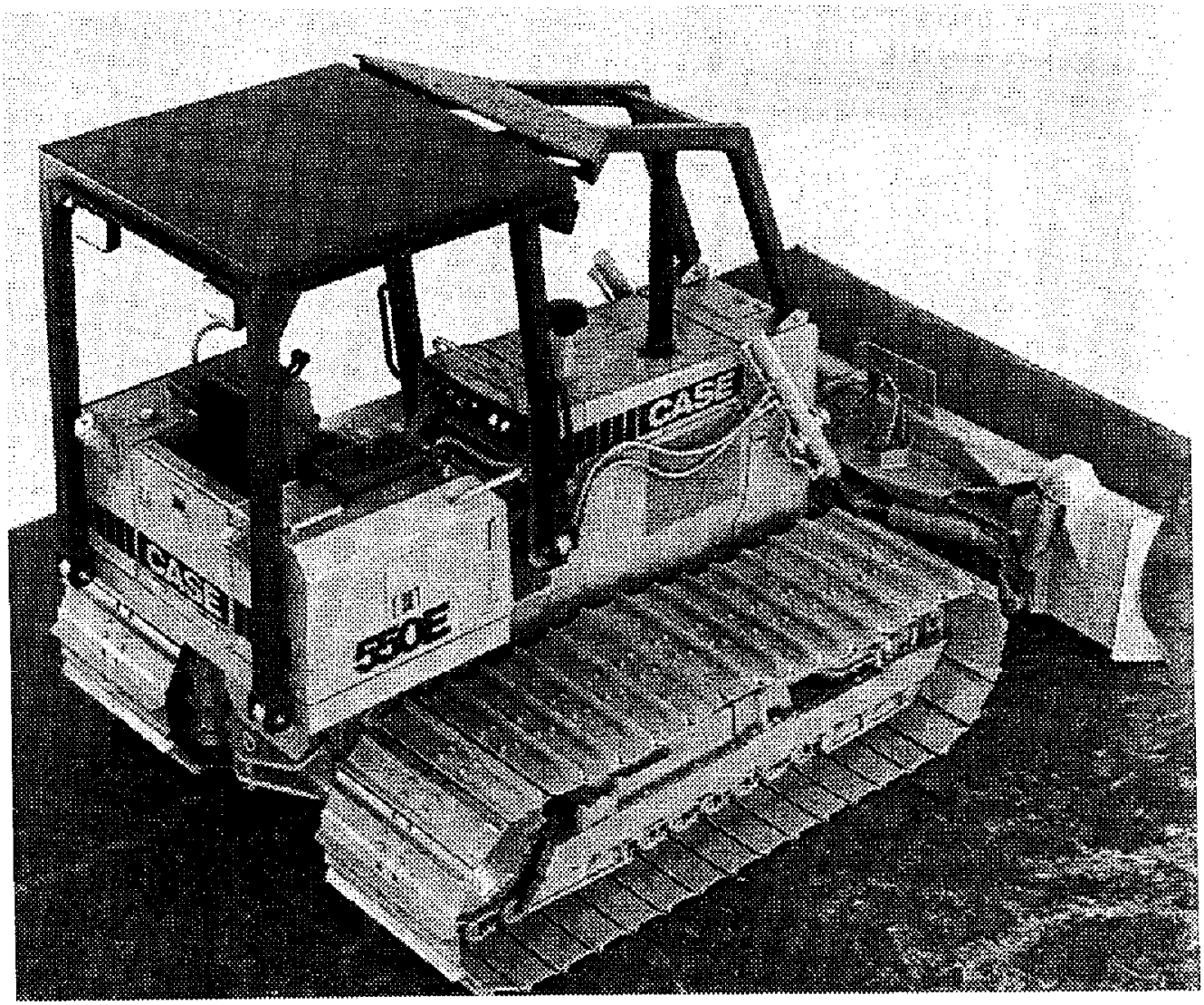
550E Crawler Parts Catalog

Bur 8-7831

This Catalog Replaces Bur 8-7830



B4074291S

This unit first became available November, 1991.

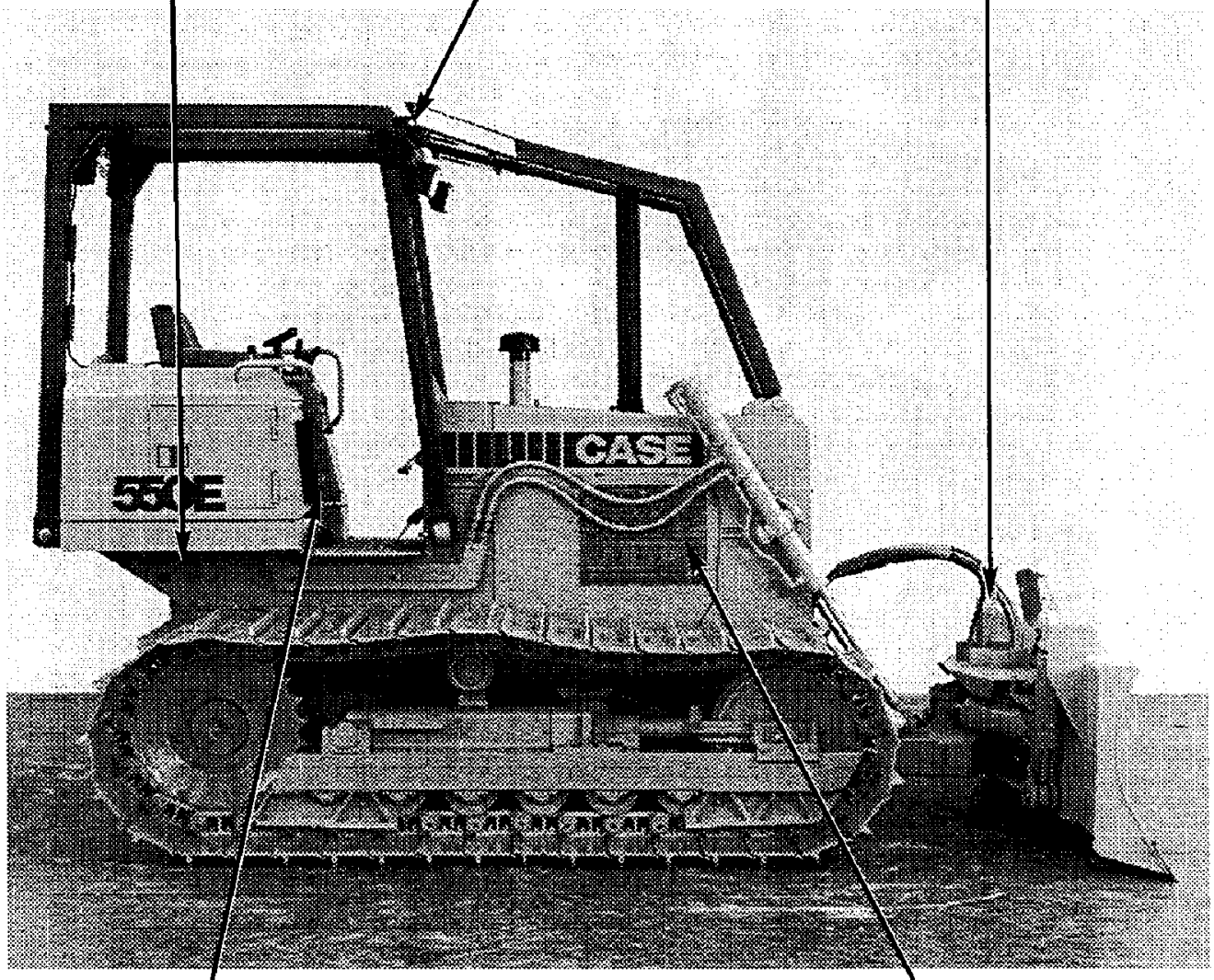
550E CRAWLER PARTS CATALOG

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION

550E Crawler

LOCATION OF SERIAL AND PRODUCT IDENTIFICATION NUMBERS

Please use the horizontal lines provided to record these important serial numbers, product identification number, and part number.



B4070191S

TRANSMISSION SERIAL NUMBER
(Upper right-hand rear of housing)

CANOPY SERIAL NUMBER
(Front inner side of roof)

DOZER BLADE SERIAL NUMBER
(Back of blade, left-hand side)

PRODUCT IDENTIFICATION NUMBER
(Lower front of hydraulic tank frame)

ENGINE SERIAL NUMBER
(Left-hand side of engine front gear cover)

RIPPER SERIAL NUMBER
(Lower ripper arm)

LOCATION OF SERIAL AND PRODUCT IDENTIFICATION NUMBERS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION

550E Crawler

GENERAL INFORMATION

Indexes

Section 1 of this catalog contains a SN and P.I.N. location guide, alphabetical index, pictorial index of the sections included, and pictorial index(es) for quick location of hoses and tubes (and other system components in some catalogs). An alphabetical index also appears at the beginning of each section. Section 10 is the Numerical Index which lists all part numbers in alpha/numeric order with their page location and reference number.

Illustrations

The arrangement of this parts catalog is for easy identification of parts. All parts are illustrated in "exploded views" in proper relation to each other. Reference numbers used in the illustrations refer to those on the text pages. The text pages list reference number, part number, part description and the quantity required.

Abbreviations

P.I.N. "Product Identification Number"

SN "Serial Number"

NSS "Not Serviced Separately" in the part number column indicates this part is not available for service.

REF "Reference" in the part number column indicates this part has special service information. The page where this information can be found is given in the part description column.

UAR "Use As Required" in the quantity required column indicates the number of parts used is determined by service needs.

Right-Hand and Left-Hand Identification

The reference to right-hand and left-hand in this catalog is identified by the operator standing at the rear of the basic unit (without rear attachment), looking toward the front of the machine (in normal forward travel). For pages covering any machine attachments, right-hand and left-hand are defined by the operator sitting in the position for proper operation of the attachment.

Catalog Revisions and Supplements

Changes to the product may make it necessary to revise or add pages to this catalog. A cover sheet will list all pages released in a revision or supplement. Each new or revised page will have a new issue date. All revised and new pages must be put into the parts catalog as soon as they are received.

Parts Orders

Orders must specify product model, all necessary serial numbers, correct part number, complete description, quantity required, method of shipment, and shipping address.

Text Format Explanation

An assembly may contain service items. The component parts of an assembly or subassembly are indented. The quantity required column lists the number of assemblies required for a completed machine, and the number of components required in a complete assembly or subassembly.

The example below illustrates the use of indents and other text page elements explained on this page.

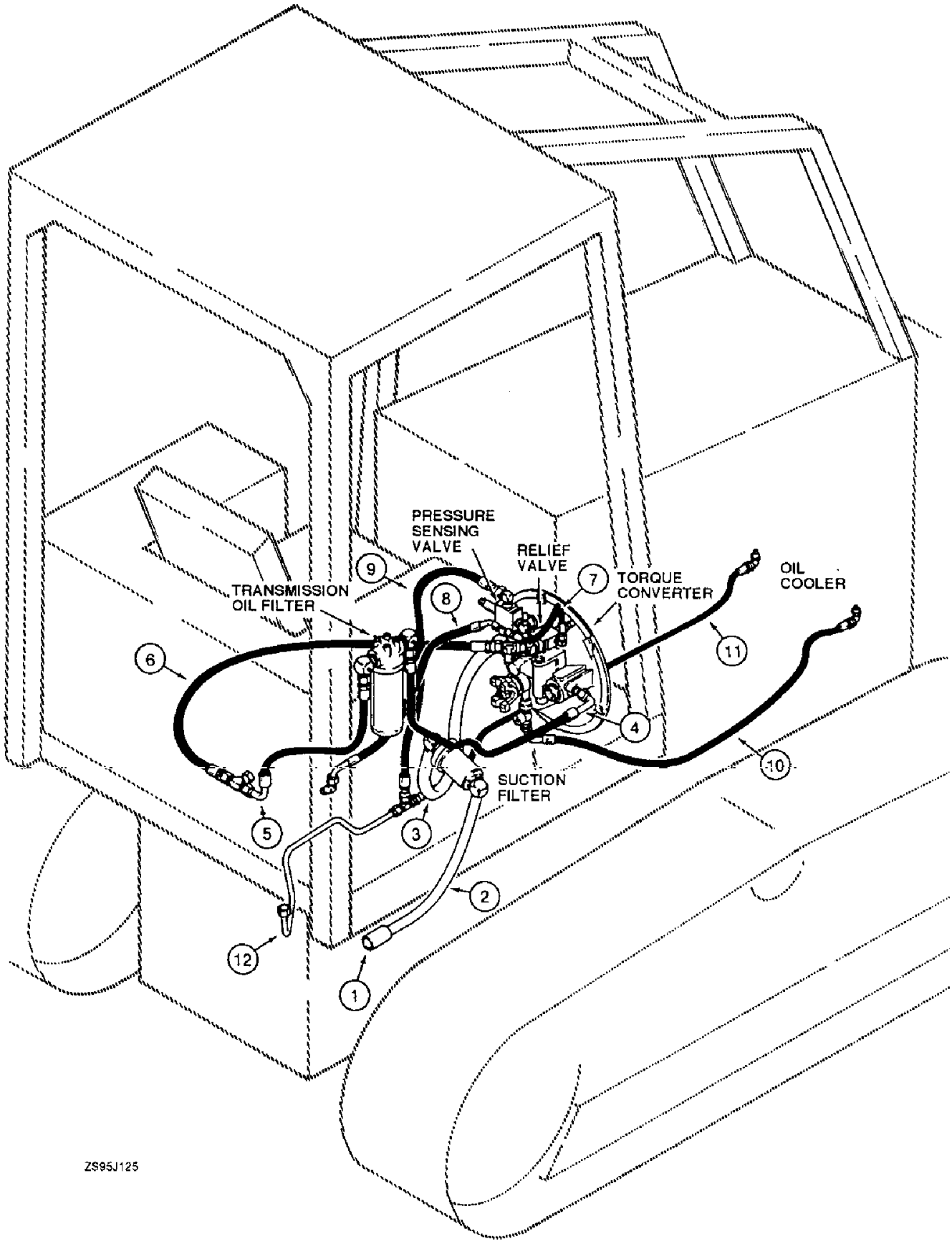
HYDRAULIC FILTER

REF.	PART NO.	DESCRIPTION	REQ'D.
1	D4356734	FILTER ASSEMBLY - hydraulic oil, P.I.N. 7534840 and after	1
	D61903	HEAD ASSEMBLY - filter	1
2	NSS	HEAD - filter, order D61903 head assembly	1
3	D58199	VALVE - bypass	1
	D43800	KIT - filter element, replaces D35700 element kit	1
4	NSS	ELEMENT - filter, order D43800 element kit	1
5	A27994	O-RING - filter	1
6	D61948	HOUSING -filter	1
7	REF	CANOPY - ROPS, order from Machinery Price List	1
8	843065C1	HOSE - 132 inch (3353 mm) long, reservoir to pump	1
9	113-323	BOLT - hex, 7/16 NC x 1-3/4 inch	2
10	814-8030	BOLT - hex, 8 - 1.25 x 30 mm	4

GENERAL INFORMATION

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION

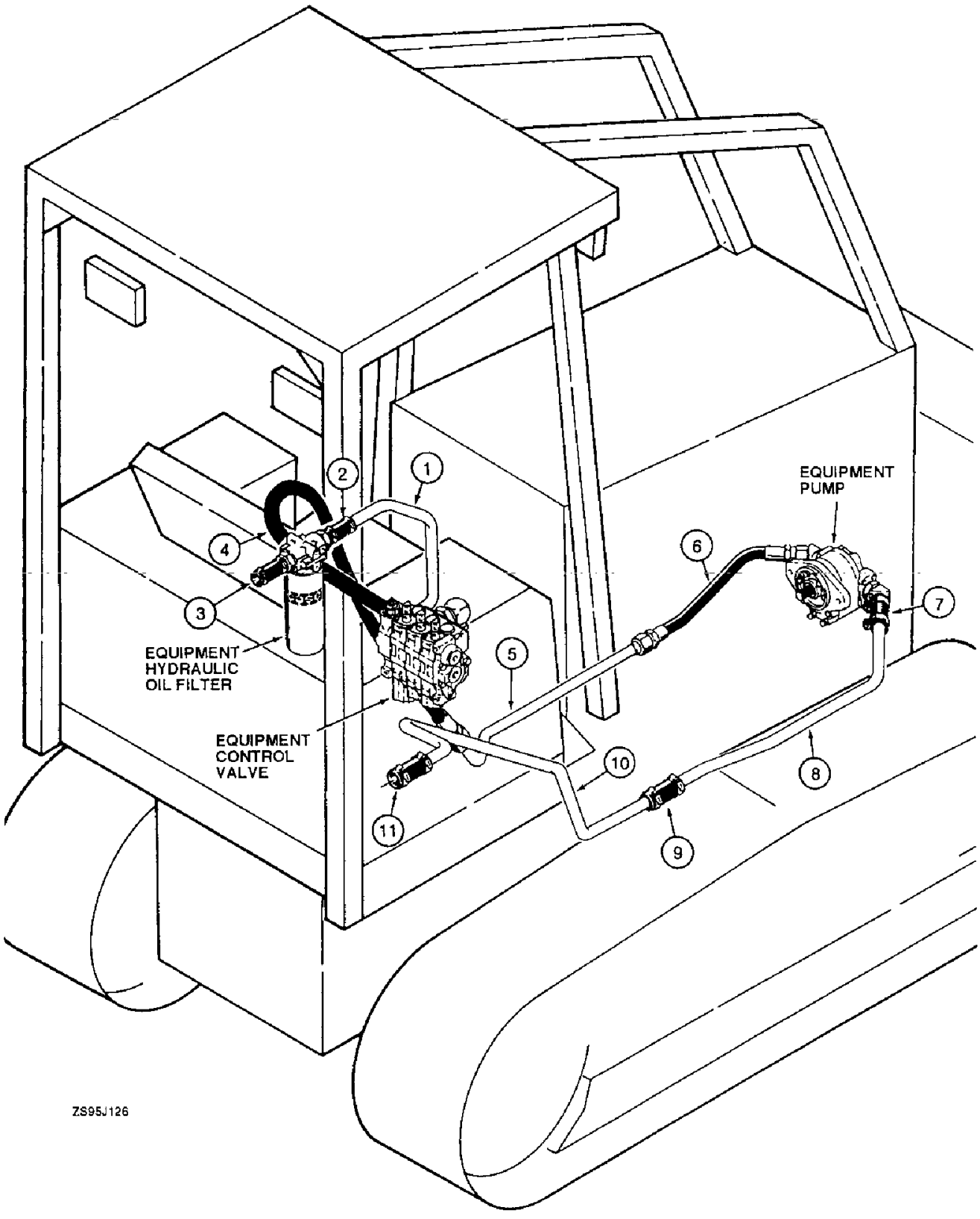
PICTORIAL INDEX, CRAWLER HYDRAULIC CIRCUITS, TRANSMISSION SUPPLY, RETURN, AND COOLING LINES



PICTORIAL INDEX, CRAWLER HYDRAULIC CIRCUITS, TRANSMISSION SUPPLY, RETURN, AND COOLING LINES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		{}			Suction Hose at Transmission, figure 6-41
2		{}			Suction Tube from Transmission to Suction Filter, figure 6-41
3		{}			Suction Hose from Filter to Torque Converter, figure 6-41
4		{}			Supply Hose at Torque Converter to Filter, figure 6-39
5		{}			Supply Hose at Modulator Valve from Filter, figure 6-39
6		{}			Supply Hose at Relief Valve from Modulator Valve, figure 6-39
7		{}			Supply Hose at Pressure Sensing Valve from Relief Valve, figure 6-39
8		{}			Return Hose from Pressure Sensing Valve to Transmission, figure 6-43
9		{}			Cooling Circuit Hose at Pressure Sensing Valve, figure 6-43
10		{}			Cooling Circuit Hose from Torque Converter to Oil Cooler, figure 6-43
11		{}			Return Hose from Oil Cooler to Transmission, figure 6-43
12		{}			Return Tube from Oil Cooler Hose to Transmission, figure 6-43

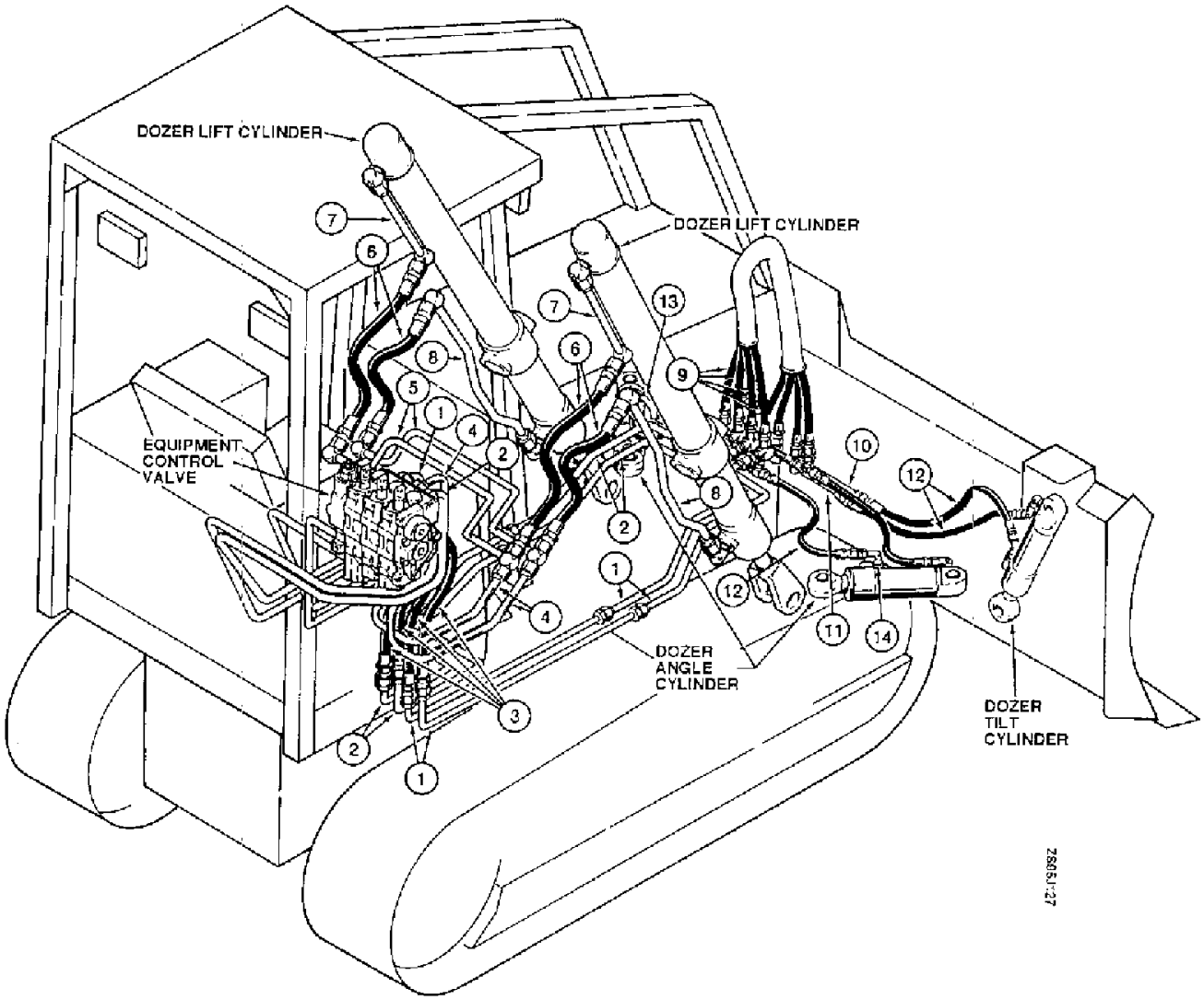
PICTORIAL INDEX, EQUIPMENT HYDRAULIC CIRCUIT, SUPPLY AND RETURN LINES



PICTORIAL INDEX, EQUIPMENT HYDRAULIC CIRCUIT, SUPPLY AND RETURN LINES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		{}			Return Tube from Control Valve to Filter, figure 8-7
2		{}			Return Hose to Filter from Control Valve, figure 8-7
3		{}			Return Hose from Filter to Reservoir, figure 8-7
4		{}			Supply Hose at Control Valve from Pump, figure 8-5
5		{}			Supply Tube to Control Valve from Pump, figure 8-5
6		{}			Supply Hose at Pump, to Control Valve, figure 8-5
7		{}			Supply Hose at Pump, figure 8-5
8		{}			Intermediate Supply Tube to Pump, figure 8-5
9		{}			Intermediate Supply Hose from Reservoir to Pump, figure 8-5
10		{}			Supply Tube at Reservoir, figure 8-5
11		{}			Supply Hose at Reservoir, figure 8-5

PICTORIAL INDEX, DOZER LIFT, TILT AND ANGLE HYDRAULIC CIRCUITS



PICTORIAL INDEX, DOZER LIFT, TILT AND ANGLE HYDRAULIC CIRCUITS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		{}			Tilt Tubes from Control Valve to Grille, figure 8-13
2		{}			Angle Tubes from Control Valve to Grille, figure 8-13
3		{}			Intermediate Tilt and Angle Hoses, figure 8-13
4		{}			Lift Tubes from Control Valve, figure 8-11
5		{}			Crossover Tubes to Lift Cylinders, figure 8-11
6		{}			Hoses to Lift Cylinders, figure 8-11
7		{}			Tube to Closed End of Lift Cylinders, figure 8-11
8		{}			Tube to Rod End of Lift Cylinders, figure 8-11
9		{}			Tilt and Angle Hoses from Grille to Blade, figure 8-15
10		{}			Tube to Rod End of Tilt Cylinder, figure 8-15
11		{}			Tube to Closed End of Tilt Cylinde, figure 8-15
12		{}			Hoses to Tilt and Angle Cylinders, figure 8-15
13		{}			Tube to Rod end of Left-Hand Angle Cylinder, figure 8-15
14		{}			Tube to Rod end of Right-Hand Angle Cylinder, figure 8-15

SECTION INDEX

Engine

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2-04	FRONT GEAR COVER, 4-390 ENGINE, 4T-390 ENGINE
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2-08	TURBOCHARGER SYSTEM, 4T-390 ENGINE
2-10	TURBOCHARGER ASSEMBLY, 4T-390 ENGINE
2-12	OIL FILTER AND COOLER, 4-390 ENGINE, 4T-390 ENGINE
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2-18	CYLINDER HEAD AND VALVE MECHANISM, 4-390 ENGINE, 4T-390
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2-42	RADIATOR FAN, BELT, AND MOUNTING
2-44	ENGINE DIPSTICK AND FILL TUBE
2-46	RADIATOR, HOSES, AND COOLANT BOTTLE
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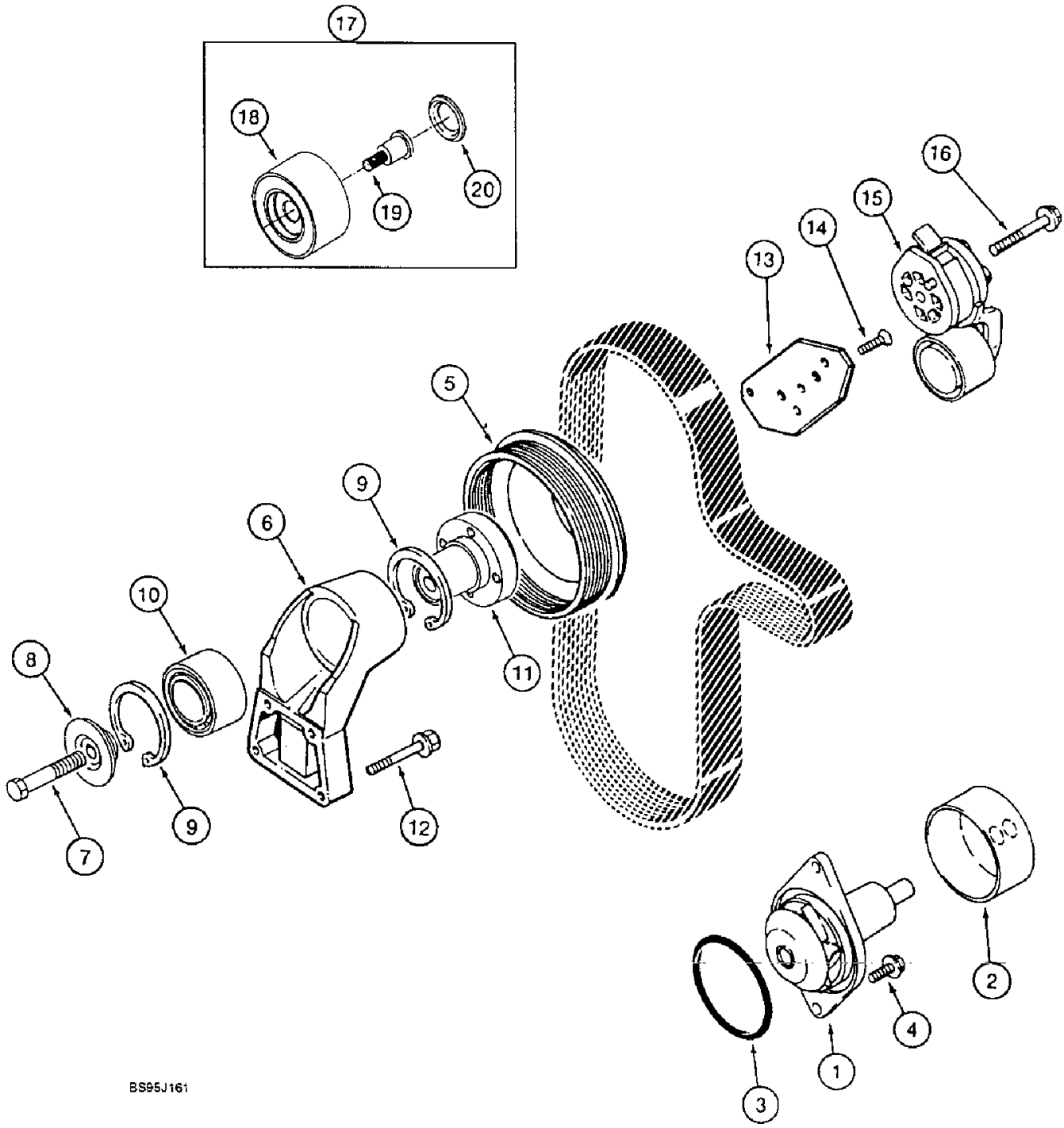
2-50	AIR CLEANER
2-52	AIR RESTRICTION INDICATOR, MODELS WITHOUT A
2-54	AIR RESTRICTION INDICATOR, MODELS WITH A TURBOCHARGER
2-56	MUFFLER MOUNTING AND EXHAUST PARTS, MODELS WITHOUT
2-58	MUFFLER MOUNTING AND EXHAUST PARTS, MODELS WITH A

WATER PUMP SYSTEM, 4-390 ENGINE, 4T-390 ENGINE



WATER PUMP SYSTEM, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		A77703		1	PUMP, WATER KIT - water pump
		J286278R		1	REMAN-WATER PUMP 550E
		J286278C			CORE-WATER PUMP Return Number
1		NSS		1	NOT SERVICED SEPARATELY PUMP - water
2		NSS		1	NOT SERVICED SEPARATELY PULLEY - water pump
3		238-5341		1	O-RING -341, 70 Duro, 3.475" ID x .210" Thk
4		J900227		2	SCREW Hex, M8 x 1.25 x 22
5		J914459		1	PULLEY - fan
6		J911922		1	SUPPORT ASSY. BRACKET - fan pulley, 60 mm bolt circle
7		J907769		1	BOLT - hex, special, 10 - 1.5 x 70 mm, class 12.9
8		J923044		1	RETAINER - fan hub
9		100-21250		2	SNAP RING 2.50", Int, #250 Ring, Snap, 2.50", Int, #250
10		J910739		1	BALL BEARING BEARING - ball
11		J911924		1	HUB - fan
12		845-8040		4	BOLT Hex Flg, M8 x 40, 8.8 - heavy hex flange, 8 - 1.25 x 40 mm, 8.8
13		J919736		1	SUPPORT BRACKET - belt tension
14		J925186		2	SCREW Torx Soc, M8 x 1.25 x 25 - flat head cap, hex socket, special, 8 - 1.25 x 25 mm
15		J918944		1	BELT TENSIONER TENSIONER - belt, replaces J914086 tensioner
16		854-10070		1	BOLT Hex Flg, M10 x 70, 10.9 - heavy hex flange, 10 - 1.5 x 70 mm, class 10.9
17		A77817		1	PACKAGE, REPAIR KIT - belt tensioner pulley, used to replace pulley of J918944 belt tensioner, item 15
18		NSS		1	NOT SERVICED SEPARATELY PULLEY - belt tensioner
19		NSS		1	NOT SERVICED SEPARATELY BOLT - pulley
20		NSS		1	NOT SERVICED SEPARATELY SEAL - dust

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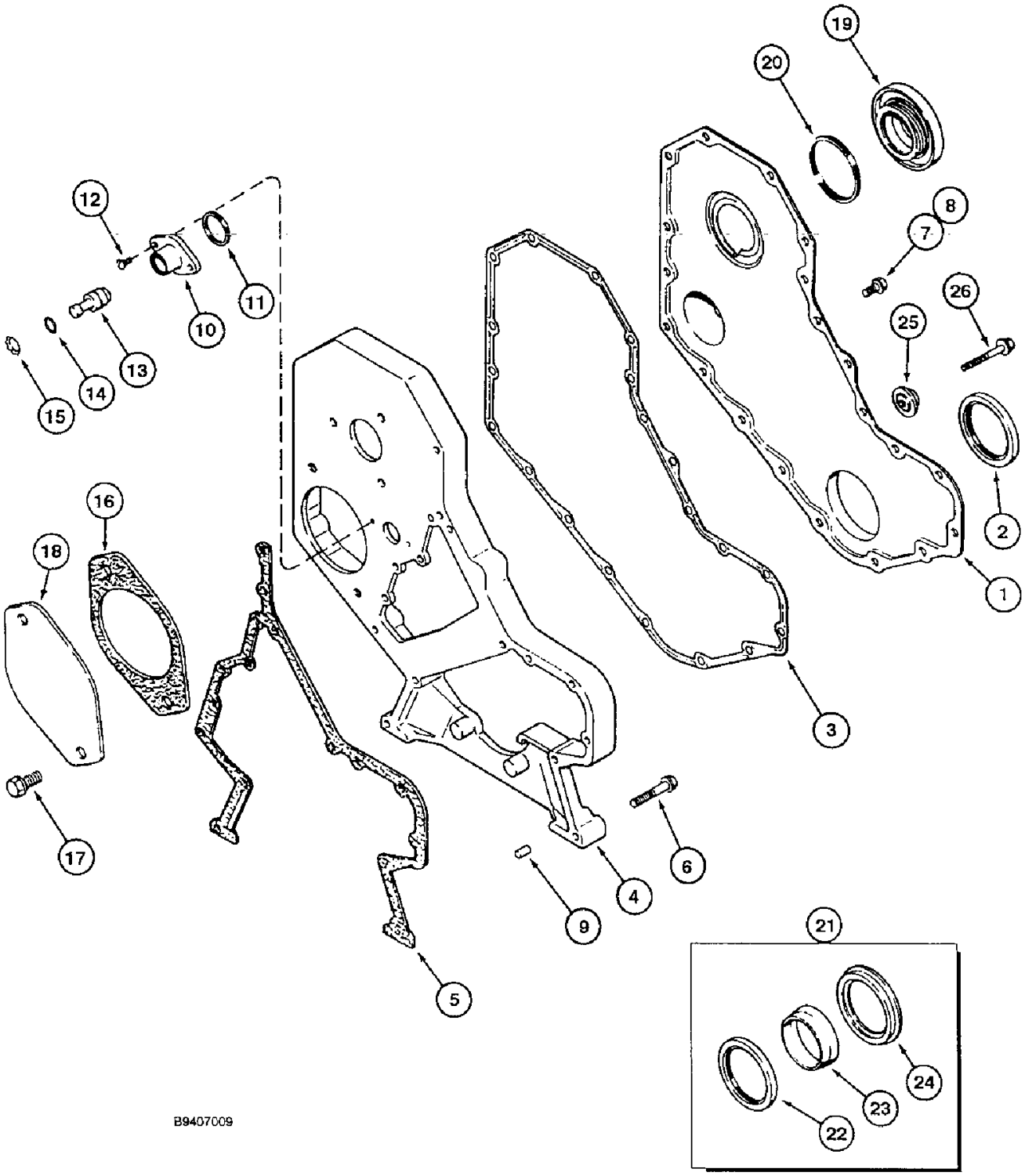
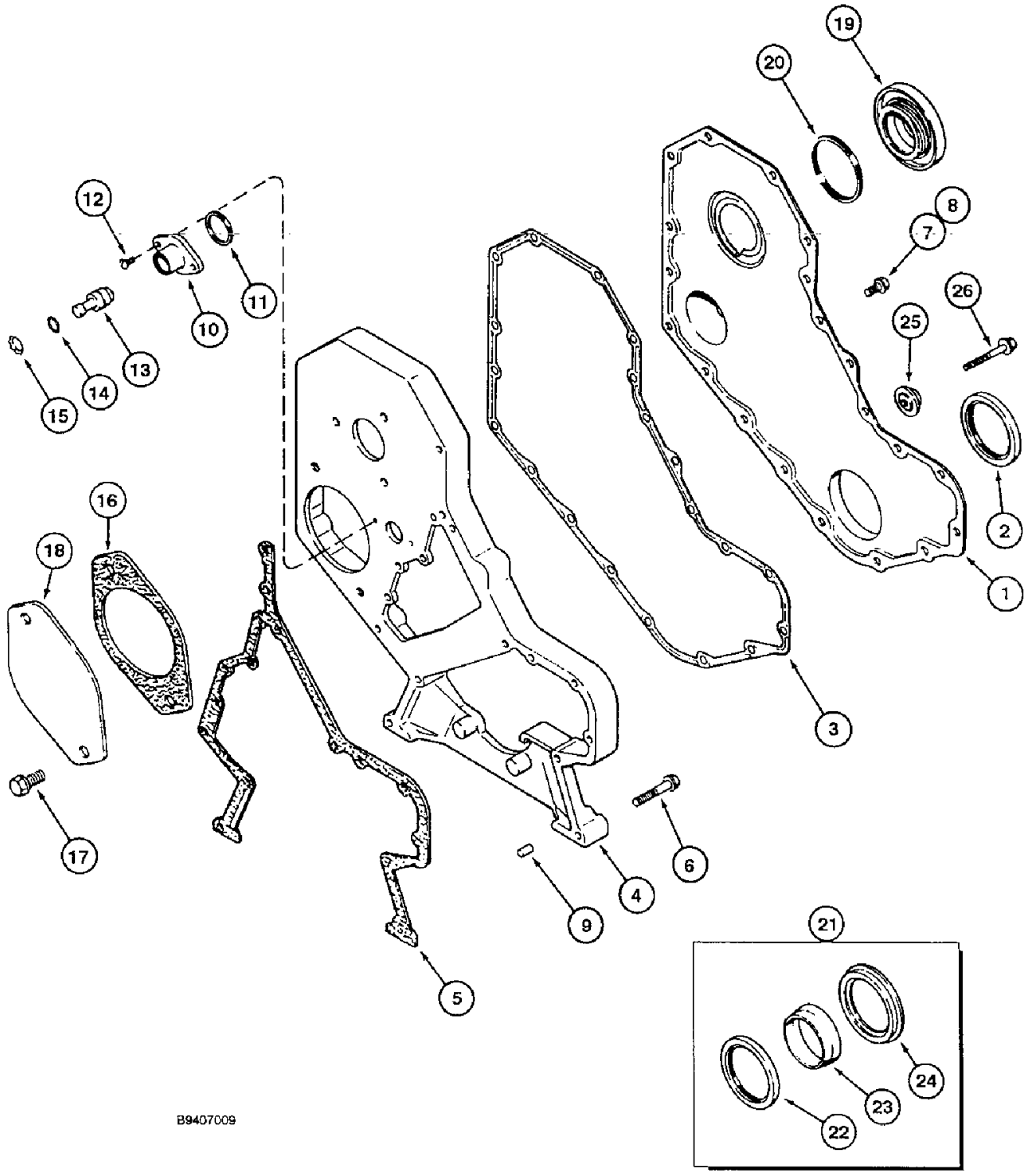
FRONT GEAR COVER, 4-390 ENGINE, 4T-390 ENGINE



FRONT GEAR COVER, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		J903794		1	COVER - gear, front
2		NSS		1	NOT SERVICED SEPARATELY SEAL - oil, crankcase front, order item 21, J904353 seal kit
3		J914385		1	GASKET - front cover
4		J920758		1	HOUSING - timing gear, replaces J920518 housing
5		J916131		1	GASKET - gear housing
6		845-8050		10	BOLT Hex Flg, M8 x 50, 8.8 - heavy hex flange, 8 - 1.25 x 50 mm
7		J924962		11	FLANGE BOLT BOLT - hex flange, special, 8 - 1.25 x 16 mm, external, retains item 1 to item 4
8		J924962		5	FLANGE BOLT BOLT - hex flange, special, 8 - 1.25 x 16 mm, internal, retains item
9		J900257		2	PIN - dowel, 16 mm long, locating
10		J919683		1	HOUSING - timing pin
11		J915772		1	SEAL SEALRING - quad, timing pin housing
12		J907998		2	SCREW Spc Rd Torx Hd, M5 x 17 LOCK, Spc Rd Torx Hd, M5 x 17
13		J903924		1	PIN - timing
14		J913994		1	O-RING - sealing, timing pin
15		J904849		1	SNAP RING 0.875", Int, #87 RING, SNAP, , timing pin 0.875", Int, #87
16		J919601		2	GASKET - access cover plate
17		854-12025		2	BOLT Hex Flg, M12 x 25, 10.9 - heavy hex flange, 12 - 1.75 x 25 mm, class 10.9
18		J914868		1	COVER PLATE - access cover, flat
19		J903463		1	COVER - front access, fuel pump drive gear
20		J903475		1	SEALING RING - front access cover, fuel pump drive gear
21		J904353		1	GASKET KIT KIT - oil seal, crankshaft front
22		NSS		1	NOT SERVICED SEPARATELY SEAL - oil, crankshaft front

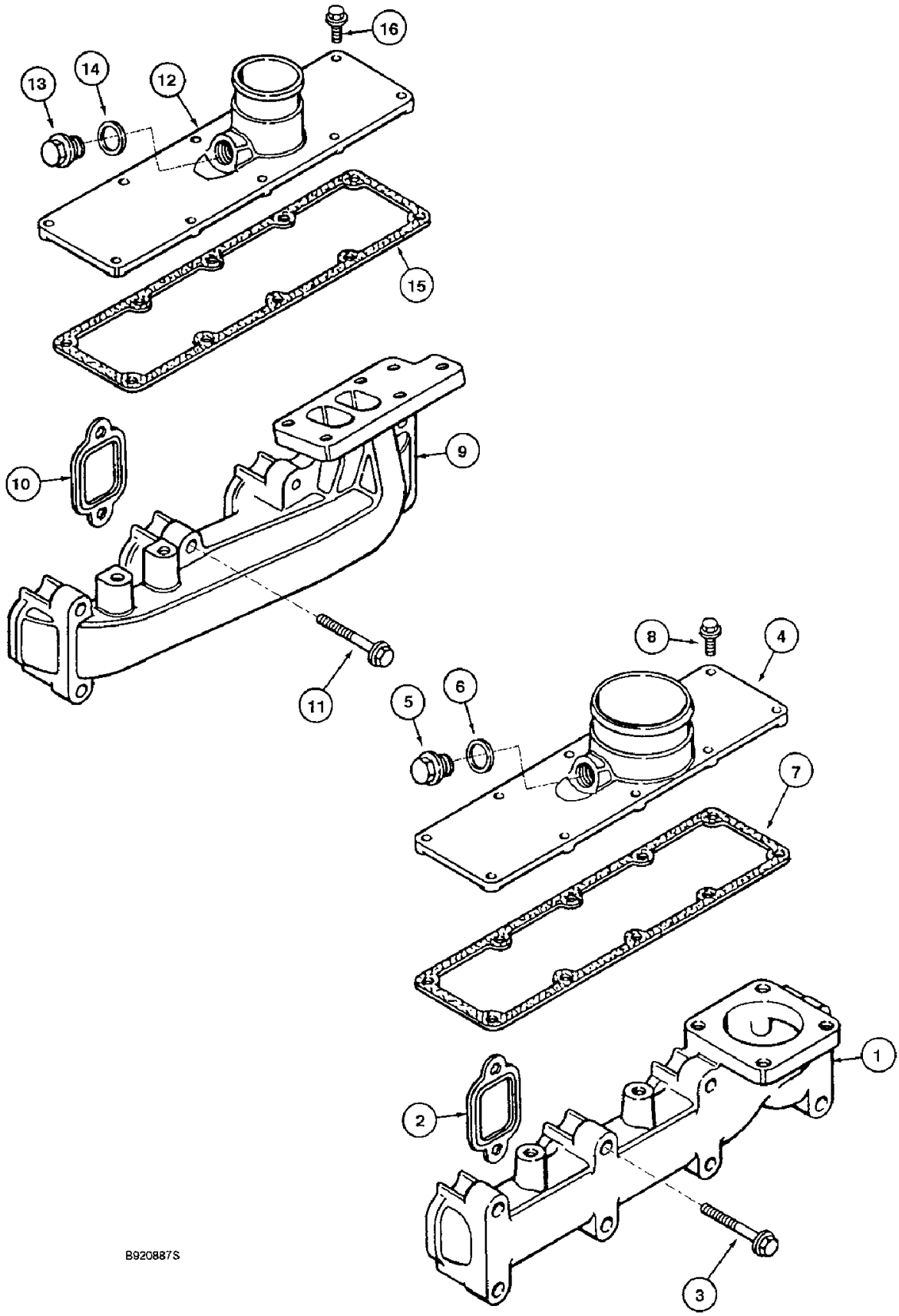
FRONT GEAR COVER, 4-390 ENGINE, 4T-390 ENGINE



FRONT GEAR COVER, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
23		NSS		1	NOT SERVICED SEPARATELY TOOL - seal installation
24		NSS		1	NOT SERVICED SEPARATELY TOOL - seal installation
25		J912772		1	RETAINER - bolt
26		845-8060		1	BOLT Hex Flg, M8 x 60, 8.8 - heavy hex flange, 8 - 1.25 x 60 mm

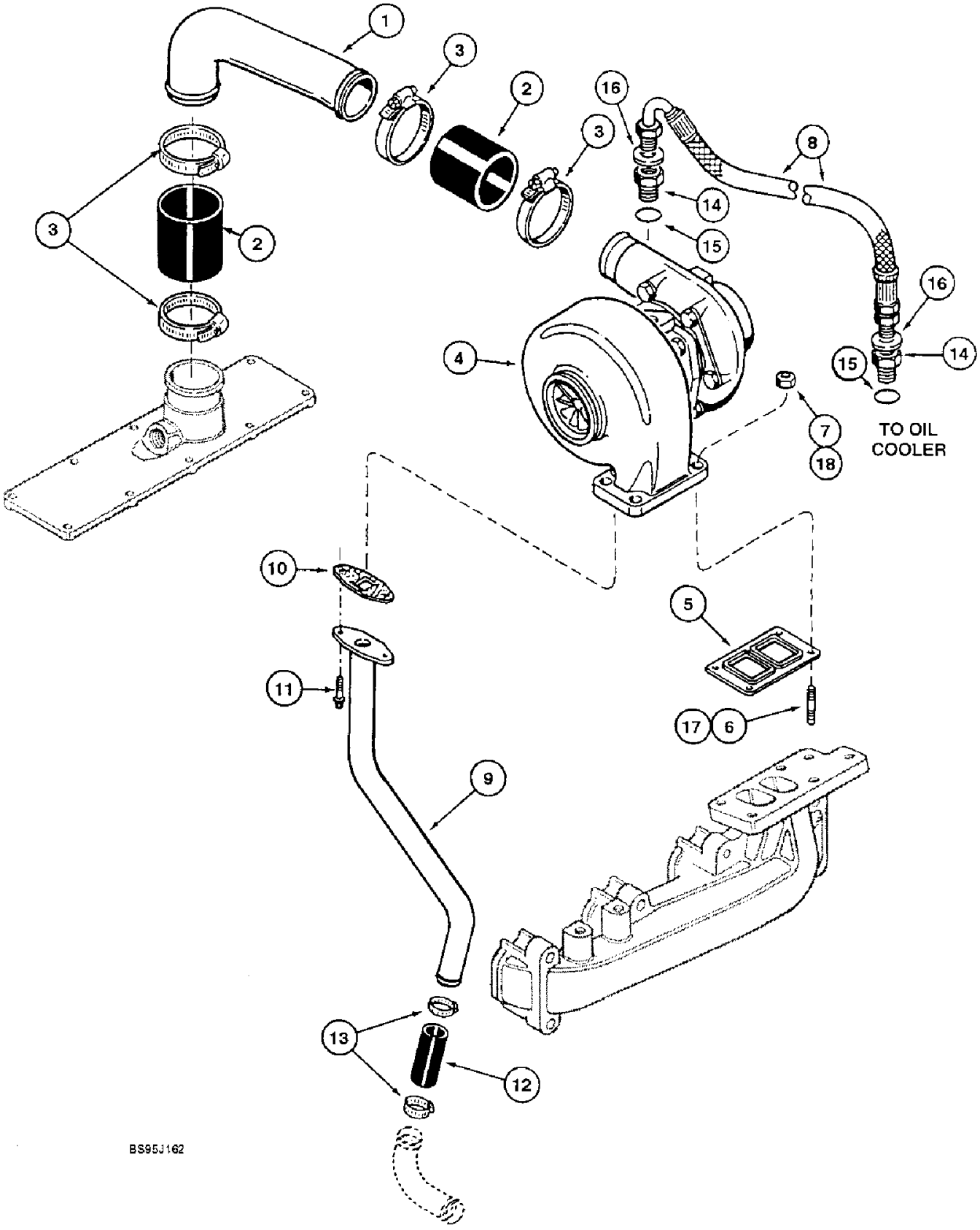
MANIFOLDS - EXHAUST AND INTAKE, 4-390 ENGINE, 4T-390 ENGINE,



MANIFOLDS - EXHAUST AND INTAKE, 4-390 ENGINE, 4T-390 ENGINE,

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		J901223		1	MANIFOLD - exhaust, Naturally Aspirated
2		J905443		4	MANIFOLD GASKET - exhaust manifold
3		854-10065		8	BOLT Hex Flg, M10 x 65, 10.9 - heavy hex flange, 10 - 1.50 x 65 mm, class 10.9
		A77415		1	COVER KIT - intake manifold, Naturally Aspirated, no longer available, order components separately
4		J904340		1	COVER - intake
5		J907185		1	PLUG - manifold, remove to install cold start
6		J906773		1	WASHER - plug sealing
7		J914028		1	GASKET - intake manifold
8		J918109		10	FLANGE BOLT Hex Flg Hd, M8 x 1.25 x 25 SCREW, , Special Hex Flg Hd, M8 x 1.25 x 25
9		J901919		1	MANIFOLD - exhaust, Turbocharged
10		J905443		4	MANIFOLD GASKET - exhaust manifold
11		854-10065		8	BOLT Hex Flg, M10 x 65, 10.9 - heavy hex flange, 10 - 1.50 x 65 mm, class 10.9
		A77416		1	COVER KIT - intake manifold, Turbocharged, no longer available, order components separately
12		J904339		1	COVER - intake
13		J907185		1	PLUG - manifold, remove to install cold start
14		J906773		1	WASHER - plug sealing
15		J914028		1	GASKET - intake manifold
16		J918109		10	FLANGE BOLT Hex Flg Hd, M8 x 1.25 x 25 SCREW, , Special Hex Flg Hd, M8 x 1.25 x 25

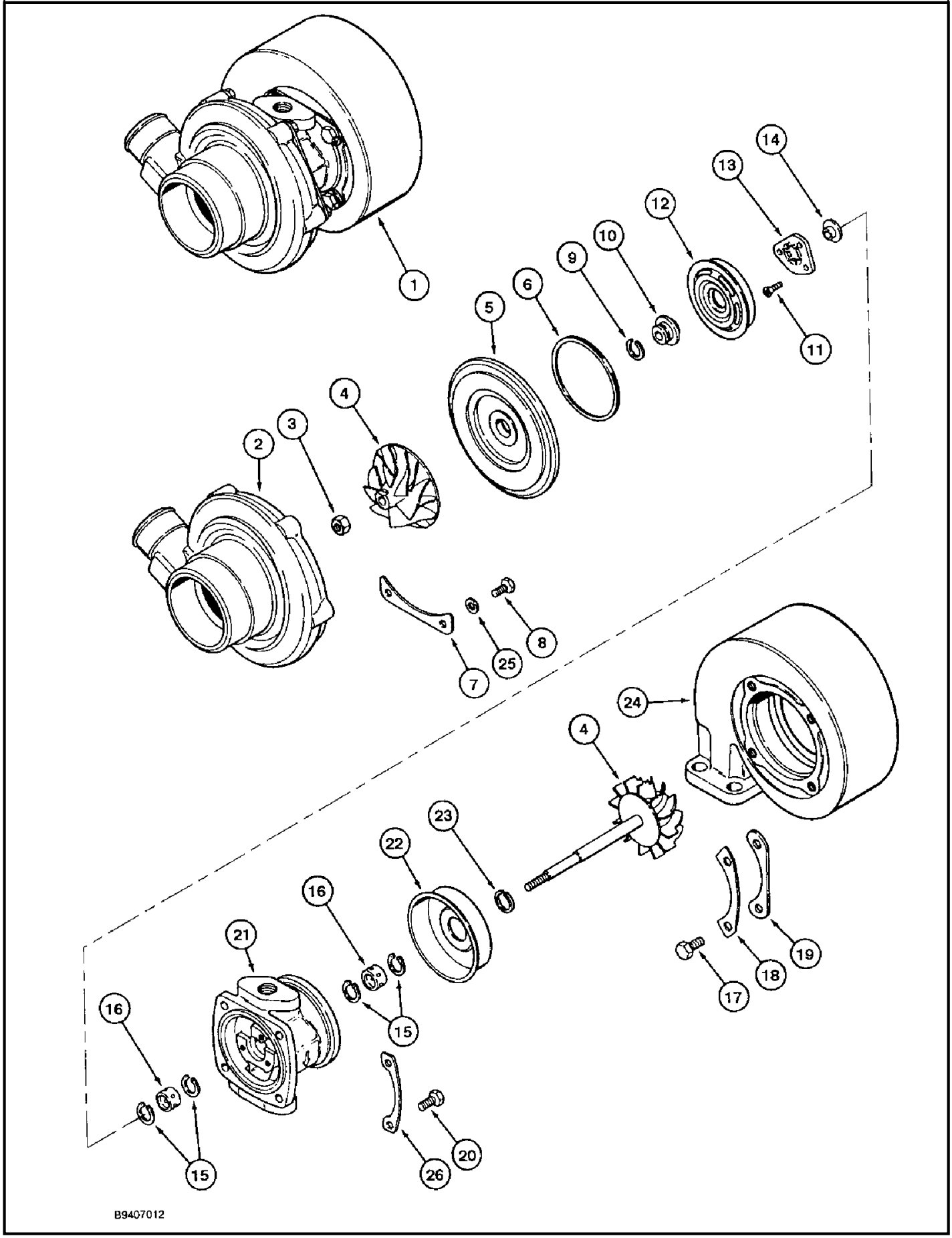
TURBOCHARGER SYSTEM, 4T-390 ENGINE



TURBOCHARGER SYSTEM, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		J906623		1	TUBE 2 mm OD x 299.8 mm L - crossover
2		J916166		2	INTAKE AIR HOSE HOSE - 2-3/4 inch (71 mm) long, air intake
3		214-1428		4	HOSE CLAMP #28, 1.31/2.25 Type F Worm CLAMP, HOSE, , Adjustable #28, 1.31/2.25 Type F Worm
4		REF		1	INSTRUCTION TURBOCHARGER ASSEMBLY - engine, see figure 2-10 for correct assembly and parts list
5		J901356		1	GASKET -
6		J905417		4	STUD - turbocharger mounting, used with item 7 nut only, if used
7		J901961		4	NUT - hex, special, 10 mm - 1.25, used with item 6 stud only, if used
8		J913759		1	HOSE Turbocharger Oil Supply
9		J903740		1	TUBE - turbocharger oil drain
10		J914388		1	GASKET - turbo oil drain tube
11		845-8020		2	BOLT Hex Flg, M8 x 20, 8.8, Full Thd - heavy hex flange, 8 - 1.25 x 20 mm
12		J903745		1	LARGE HOSE HOSE - 3 inch (76 mm) long, turbocharger oil drain
13		214-1416		2	HOSE CLAMP #16, 0.81/1.50 Type F Worm CLAMP, HOSE, , Adj. #16, 0.81/1.50 Type F Worm
14		J919687		2	HYD CONNECTOR ADAPTER - female hex, special, one used to connect turbocharger oil supply hose to J919129 turbocharger
15		238-5013		1	O-RING 0.426" ID x 0.566" OD x 0.07" -013, 70 Duro, .426" ID x .070" Thk
16		222-993		2	GASKET 3/8 Tube, Fl, Copper
17		J818823		4	STUD - turbocharger mounting, used with item 18 nut only, if used
18		J818824		4	BEARING LOCK NUT - hex flange, special, 10 mm - 1.5, used with item 17 stud only, if used

TURBOCHARGER ASSEMBLY, 4T-390 ENGINE

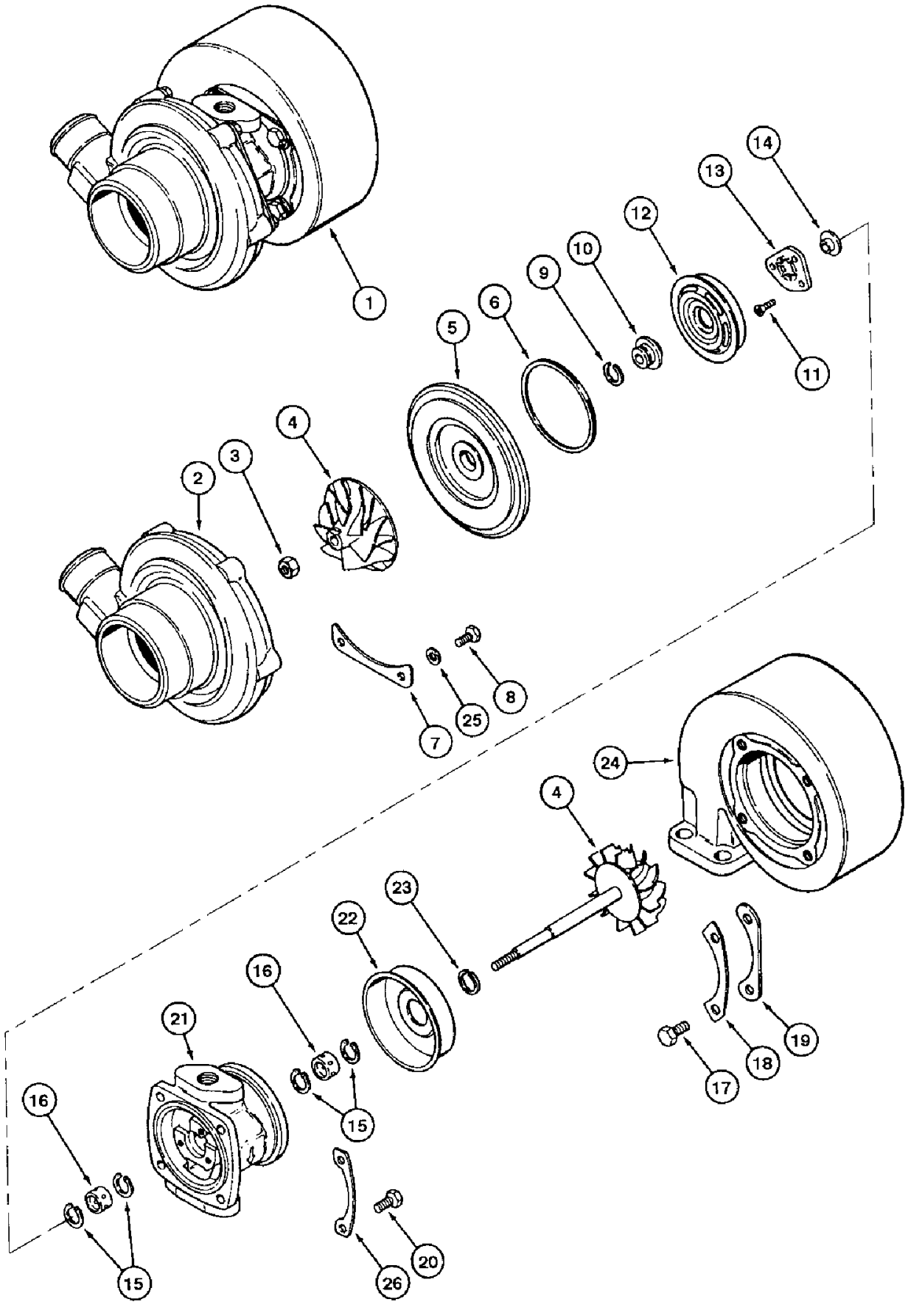


TURBOCHARGER ASSEMBLY, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		J919129		1	TURBOCHARGER TURBOCHARGER ASSEMBLY - engine, new, production only, order J802290 turbocharger kit shown below, replaces JR919135 and J919135 turbocharger assembly
2		NSS		1	NOT SERVICED SEPARATELY HOUSING - compressor
3	1	NSS		1	NOT SERVICED SEPARATELY NUT - hex, lock
4		NSS		1	NOT SERVICED SEPARATELY ROTOR - turbocharger, includes both halves
5		NSS		1	NOT SERVICED SEPARATELY DIFFUSER - compressor
6	1	NSS		1	NOT SERVICED SEPARATELY SEAL - diffuser
7		NSS		3	NOT SERVICED SEPARATELY PLATE - diffuser clamping
8	1	NSS		4	NOT SERVICED SEPARATELY SCREW - cap
9	1	NSS		1	NOT SERVICED SEPARATELY SEAL - split ring, compressor
10		NSS		1	NOT SERVICED SEPARATELY SLINGER - oil
11	1	NSS		3	NOT SERVICED SEPARATELY SCREW - flat head Torx
12		NSS		1	NOT SERVICED SEPARATELY BAFFLE - oil
13	1	NSS		1	NOT SERVICED SEPARATELY BEARING - thrust
14		NSS		1	NOT SERVICED SEPARATELY COLLAR - thrust
15	1	NSS		4	NOT SERVICED SEPARATELY RING - snap, retaining
16	1	NSS		2	NOT SERVICED SEPARATELY BEARING - impeller shaft
17	1	NSS		4	NOT SERVICED SEPARATELY BOLT - plate retaining
18	1	NSS		2	NOT SERVICED SEPARATELY PLATE - lock, turbine housing

(1) Part of Turbocharger Overhaul Kit P/N J545652

TURBOCHARGER ASSEMBLY, 4T-390 ENGINE

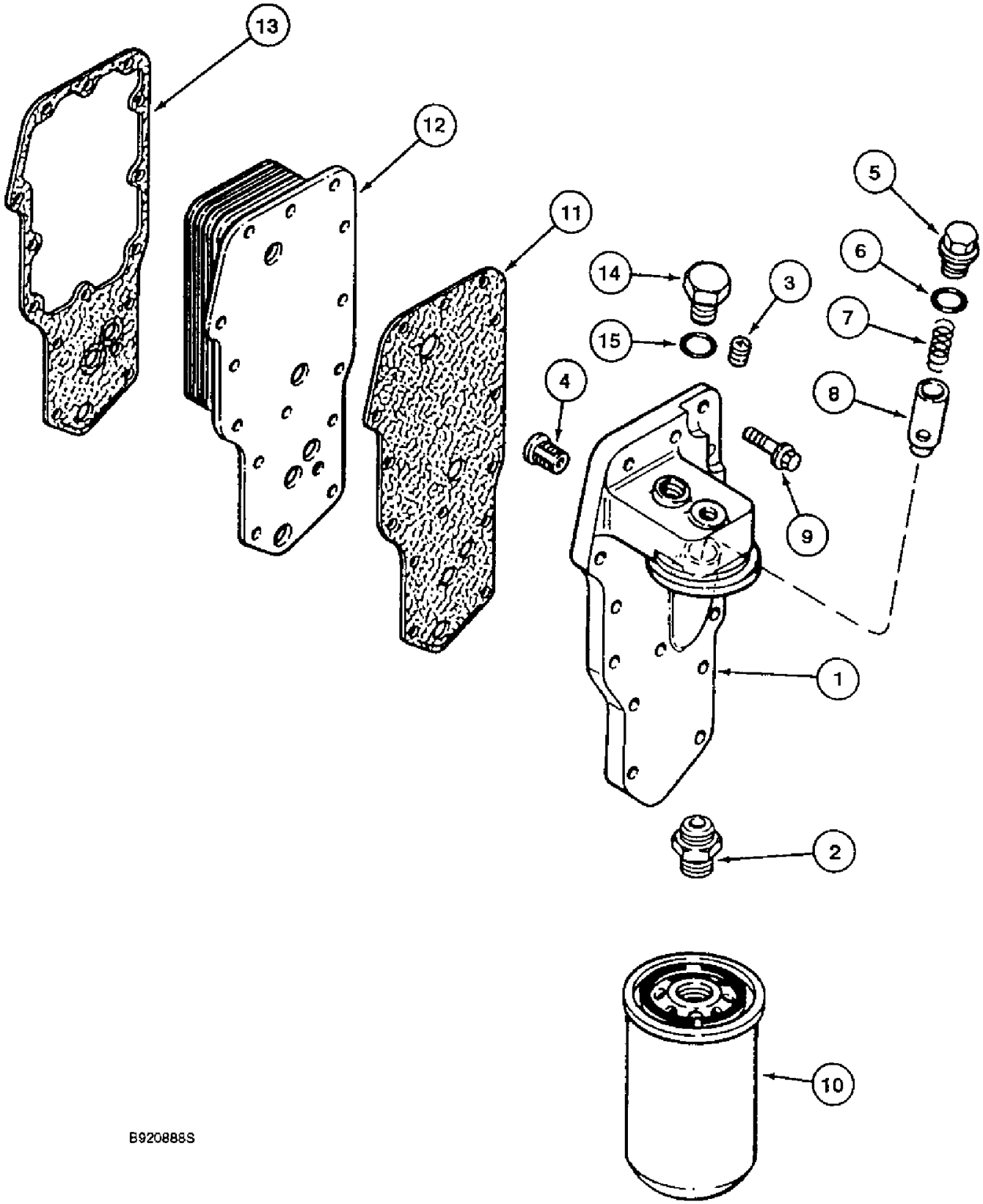


TURBOCHARGER ASSEMBLY, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
19		NSS		2	NOT SERVICED SEPARATELY PLATE - clamping, turbine housing
20	1	NSS		4	NOT SERVICED SEPARATELY BOLT - hex
21		NSS		1	NOT SERVICED SEPARATELY HOUSING - turbine bearing
22		NSS		1	NOT SERVICED SEPARATELY SHIELD - heat, turbine
23	1	NSS		1	NOT SERVICED SEPARATELY SEAL - piston ring, turbine
24		NSS		1	NOT SERVICED SEPARATELY HOUSING - turbine
25	1	NSS		8	NOT SERVICED SEPARATELY WASHER - lock
26		NSS		2	NOT SERVICED SEPARATELY PLATE - lock, turbine
		J802290		1	TURBOCHARGER KIT - turbocharger, Includes: Ref. 1
		JR802290		1	REMAN-TURBOCHARGER 570LXT, N.A. Only
		JC535381			CORE-TURBOCHARGER Return Number, For N.A. Only
		J545652		1	PACKAGE, REPAIR KIT - overhaul, turbocharger, Includes: Ref. 3, 6, 8, 9, 11, 13, 15-18, 20, 23 and 25. replaces J904772 kit

(1) Part of Turbocharger Overhaul Kit P/N J545652

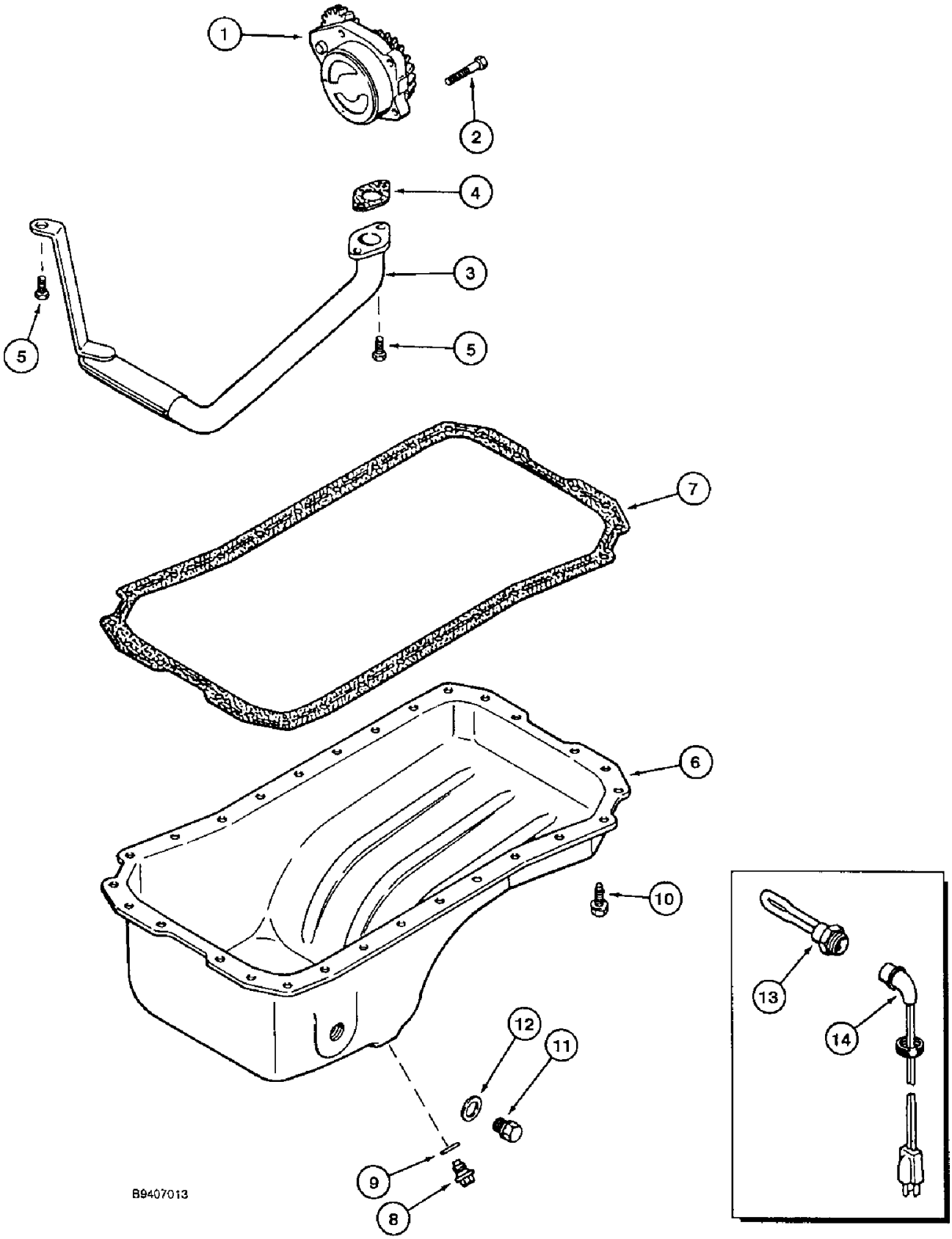
OIL FILTER AND COOLER, 4-390 ENGINE, 4T-390 ENGINE



OIL FILTER AND COOLER, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		J918954		1	HEAD ASSEMBLY - oil filter and cooler
1		NSS		1	NOT SERVICED SEPARATELY HEAD - lube oil filter
2		J909355		1	ADAPTER - filter head
3		J906619		1	PLUG - hex, 1/8 inch PT
4		J902338		1	VALVE, PRESSURE RELI VALVE - relief, pressure
5		J915787		1	PLUG - threaded, pipe
6		238-5115		1	O-RING -115, 70 Duro, .674" ID x .103" Thk (Replaces J909397) -115, 70 Duro, .674" ID x .103" Thk
7		J918427		1	SPRING - compression, 54 mm free length, 16-1/2 coils
8		J918428		1	PLUNGER - regulator, pressure
9		845-8035		14	BOLT Hex Flg, M8 x 35, 8.8 - heavy hex flange, 8 - 1.25 x 35 mm
10		J908616		1	ENGINE OIL FILTER Single pkg qty. For multi pkg [qty.12] order J908616MP FILTER - engine oil, cartridge
11		J918257		1	GASKET - filter head
12		J921557		1	COOLER CORE - cooler, oil
13		J926760		1	GASKET - oil cooler core (order J918256 until depleted)
14		J919686		1	PLUG ASSEMBLY - hex, 12 mm threaded, used on engines without a turbocharger
15		238-5013		1	O-RING 0.426" ID x 0.566" OD x 0.07" -013, 70 Duro, .426" ID x .070" Thk

OIL PUMP AND OIL PAN, 4-390 ENGINE, 4T-390 ENGINE

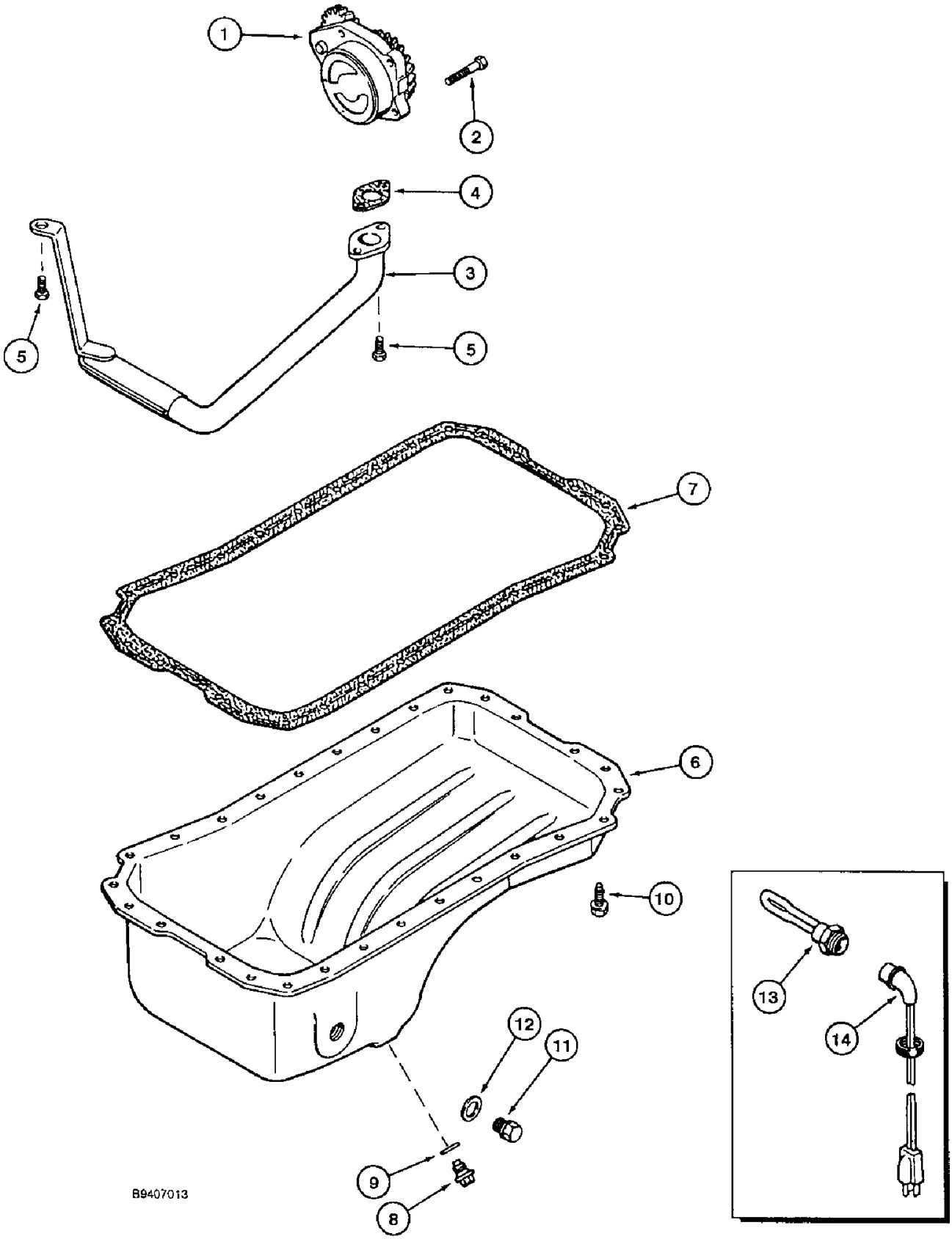


OIL PUMP AND OIL PAN, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		J926202		1	PUMP, ENGINE OIL PUMP - oil, engine, new, replaces J918211 pump
		JR926202		1	PUMP PUMP ASSEMBLY - oil, remanufactured, North America only, component parts shown on this figure do not apply to the remanufactured assembly, replaces JR918211 pump assembly
		JR930336		1	REMAN-ENG OIL PUMP REMAN-ENGINE OIL PUMP Remanufactured Oil Pump; For N.A. only
		JC926202		1	CORE PUMP, ENGINE OIL CORE-ENGINE OIL PUMP RETURN NUMBER - use this part number to return pump core for credit when using a remanufactured assembly, replaces JC918211 pump assembly
2		614-8030		4	BOLT Hex, M8 x 30, 8.8 BOLT, HH, CL 8.8, M8 x 1.25 x 30
3		J905205		1	TUBE 1" OD TUBE - suction, oil
4	1	J914383		1	GASKET GASKET - mounting, oil suction tube
5		845-8016		3	BOLT Hex Flg, M8 x 16, 8.8, Full Thd BOLT - heavy hex flange, 8 - 1.25 x 16 mm
6		J901049		1	PAN, ENGINE OIL PAN, OIL PAN - oil, engine
7	1	NSS		1	NOT SERVICED SEPARATELY GASKET - oil pan, order A77673 gasket kit for service
8		J924147		1	PLUG PLUG - hex magnetic, special, 18 mm - 1.5, oil drain, replaces J911638 plug
9	1	J920773		1	SEALING WASHER WASHER - sealing, drain plug
10		J920400		28	FLANGE BOLT Hex, Flg Hd, M8 x 21, Spcl SCREW - hex flange cap, special, M8 x 25, if used

(1) Part of Gasket Oil Pan Kit P/N A77673

OIL PUMP AND OIL PAN, 4-390 ENGINE, 4T-390 ENGINE

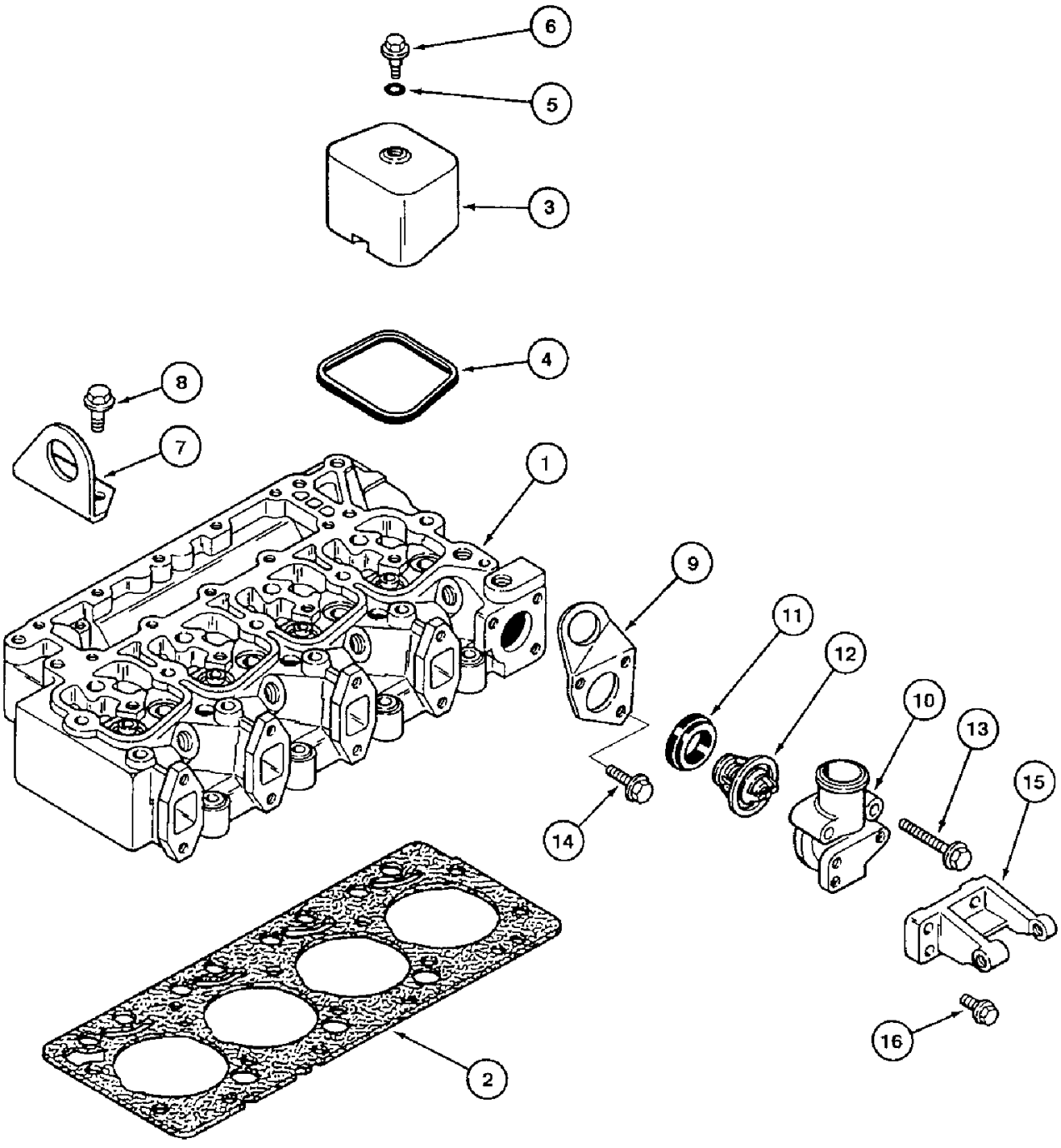


OIL PUMP AND OIL PAN, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
10		J907860		28	FLANGE BOLT Hex, Flg Hd, M8 x 25, Spcl BOLT - hex flange, special, 8 - 1.25 x 25 mm, Used with J907537 washer, if used
10A		J907537		28	BELLEVILLE SPRING WASHER - Belleville spring, oil pan bolt, used with J907860 bolt, if used, not shown
11		J924148		1	PLUG PLUG - hex magnetic, special, 22 mm - 1.5, pipe, heater hole, replaces J904386 plug
12	1	J902425		1	SEALING WASHER WASHER - sealing, plug
		A77673		1	GASKET KIT KIT - gasket, oil pan, Includes: Ref. 4, 7 and 9.
	1	A77490		1	KIT KIT - heater, engine oil
13		NSS		1	NOT SERVICED SEPARATELY ELEMENT - heater, 120 volt, engine oil
14		J905113		1	CABLE CABLE - engine block heater, 6 feet long, oil

(1) When engine oil heater kit is ordered, item 12, J902425 washer must also be ordered.

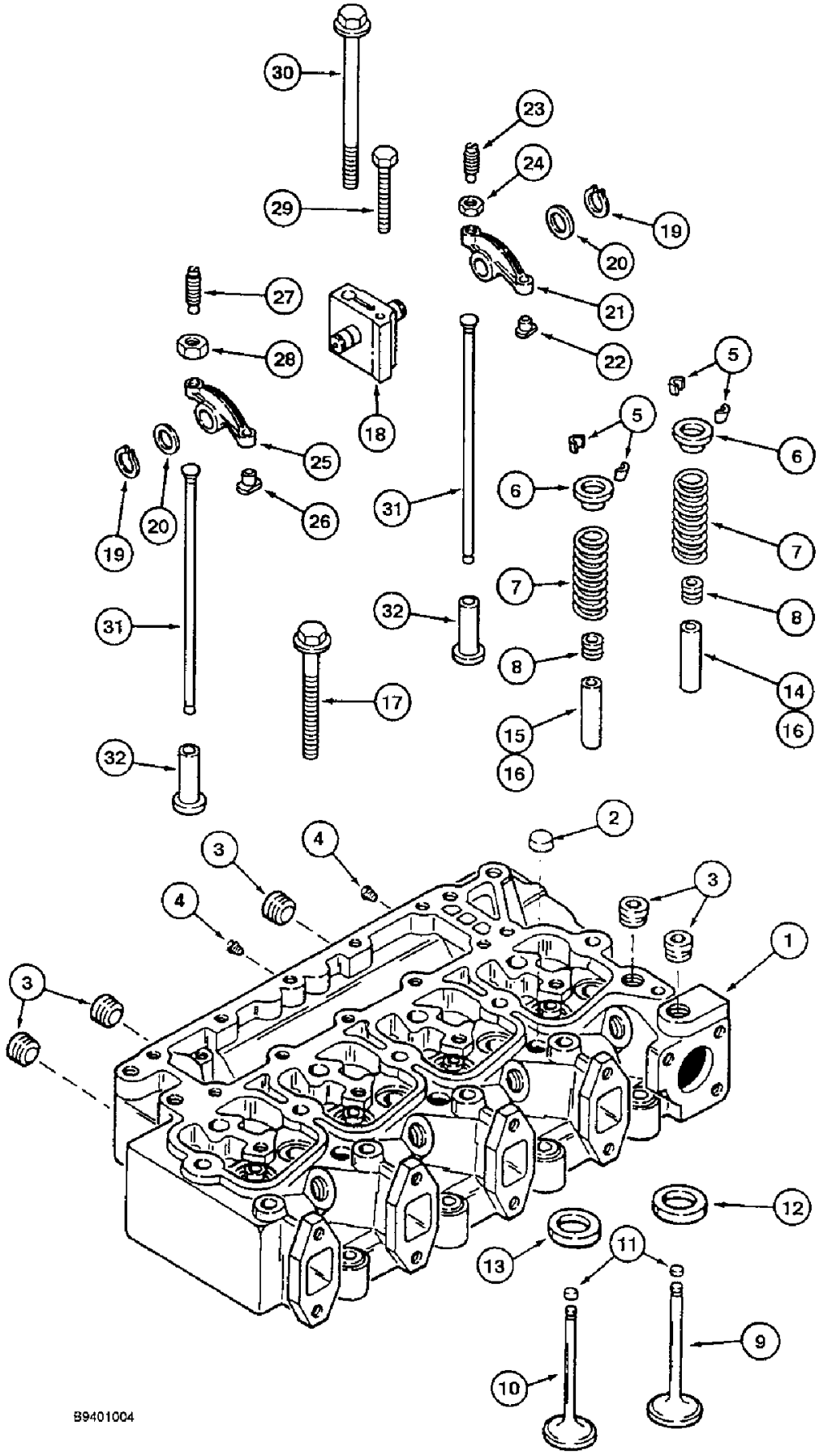
CYLINDER HEAD AND COVERS, 4-390 ENGINE, 4T-390 ENGINE



CYLINDER HEAD AND COVERS, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		REF		1	INSTRUCTION HEAD ASSEMBLY - cylinder, engine, parts list figure 2-18
2		J921393		1	GASKET - cylinder head, standard
2		J921395		1	CYLINDER HEAD GASKET - head, 2 notches, 0.25 mm overthick
2		J921397		1	GASKET - head, 3 notches, 0.50 mm overthick
3		J902604		4	COVER - rocker arm
4		J902666		4	GASKET SEAL - rocker arm cover
5		J910824		4	O-RING - cover bolt
6		J907049		4	BOLT - hex flange, special, 8 - 1.25 x 21.25 mm
7		J908118		1	BRACKET - lifting, rear
8		854-12025		2	BOLT Hex Flg, M12 x 25, 10.9 - heavy hex flange, 12 - 1.75 x 25 mm, class 10.9
9		J903757		1	BRACKET - lifting, front, thermostat and housing
10		J914409		1	HOUSING - thermostat
		A77736		1	THERMOSTAT KIT - coolant thermostat, and housing
11		J923331		1	GASKET - thermostat housing, replaces J920020 gasket
12		NSS		1	NOT SERVICED SEPARATELY THERMOSTAT - coolant, and housing
13		845-8070		2	BOLT Hex Flg, M8 x 70, 8.8 Thermostat and housing Hex Flg, M8 x 70, 8.8
14		845-8035		1	BOLT Hex Flg, M8 x 35, 8.8 - heavy hex flange, 8 - 1.25 x 35 mm, Thermostat and housing
15		J923387		1	SUPPORT - alternator mounting, replaces J910713 support, thermostat and housing
16		845-8025		3	BOLT Hex Flg, M8 x 25, 8.8 - heavy hex flange, 8 - 1.25 x 25 mm, Thermostat and housing

CYLINDER HEAD AND VALVE MECHANISM, 4-390 ENGINE, 4T-390 ENGINE

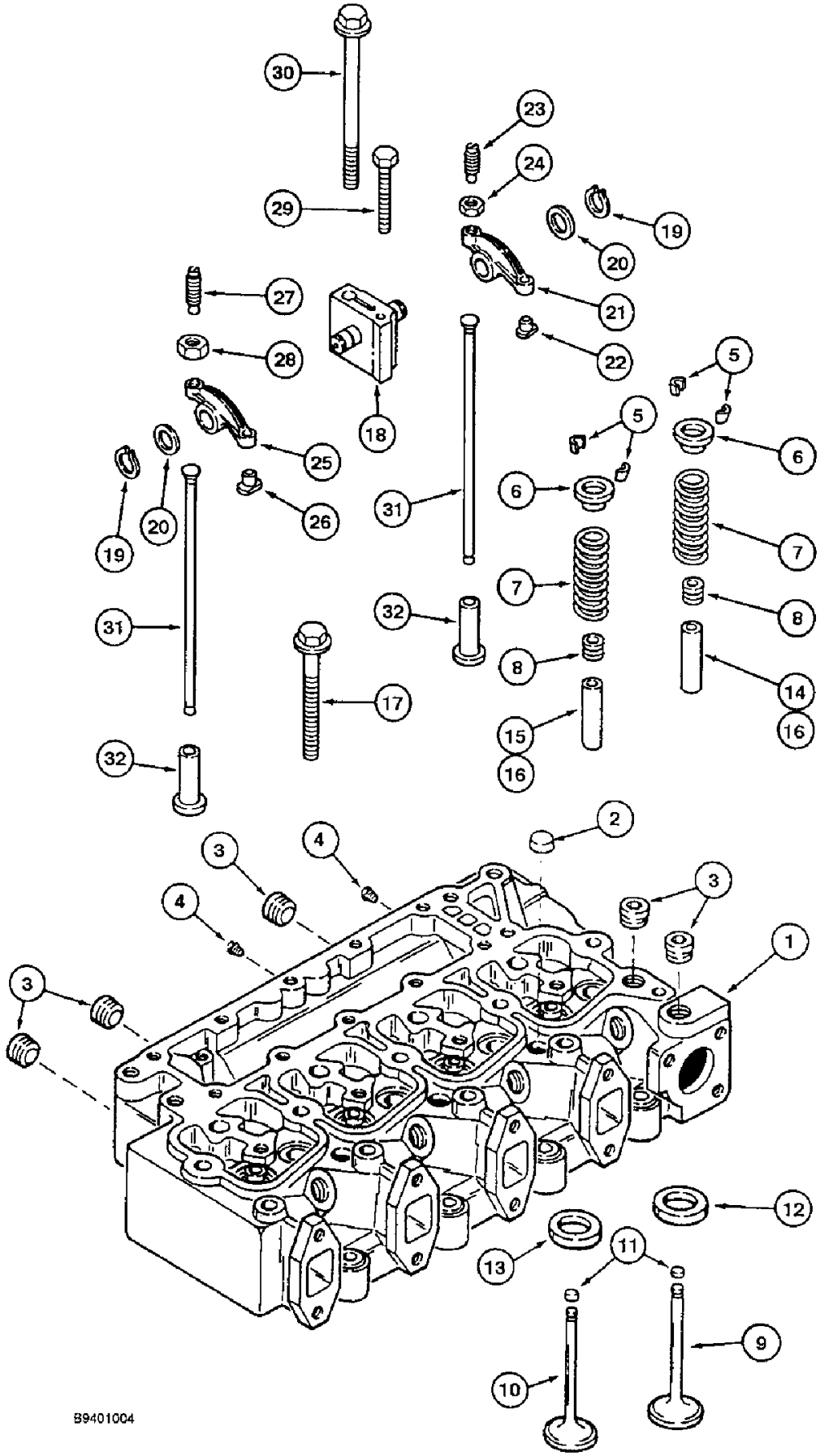


CYLINDER HEAD AND VALVE MECHANISM, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		JR929736		1	REMAN-CYLINDER HEAD HEAD ASSEMBLY - cylinder, remanufactured, North America only, component parts shown on this figure do not apply to the remanufactured assembly, replaces JR920611 head assembly
		JC929736		1	CORE-CYLINDER HEAD RETURN NUMBER - use this part number to return head for credit when using a remanufactured assembly, replaces JC920611
1		J929736		1	HEAD (CYLINDER) HEAD ASSEMBLY - cylinder, new, with valves, replaces J920611 head assembly
1		J920005		1	HEAD (CYLINDER) HEAD ASSEMBLY - cylinder, new, without valves
2		A77783		3	PLUG - expansion, 21 mm OD
3		A77429		5	PLUG - hex socket, 1/2 inch PT, one removed to install temperature sending unit
4		J906619		2	PLUG - hex, 1/8 inch PT
5		{J900250}		16	KEEPER - valve
6		J900299		8	RETAINER - valve spring
7		J926700		8	VALVE SPRING SPRING - valve, replaces J900276 spring
8		J901097		8	SEAL - valve
9		J920867		4	VALVE - intake
10		J920868		4	VALVE - exhaust
11		J280911		UAR	WEAR PAD PAD - wear, service repair only for valve stem tip, for use on intake and exhaust valves
12		J906854		4	SEAT, VALVE SEAT - insert, intake valve, service repair only
13		J904105		4	SEAT, VALVE SEAT - insert, exhaust valve, service repair only
14	1	J904408		4	GUIDE - valve, intake, service repair only, 14 mm OD
15	1	J904409		4	GUIDE - valve, exhaust, service repair only, 14 mm OD

(1) These parts are semi-finished valve guides.

CYLINDER HEAD AND VALVE MECHANISM, 4-390 ENGINE, 4T-390 ENGINE

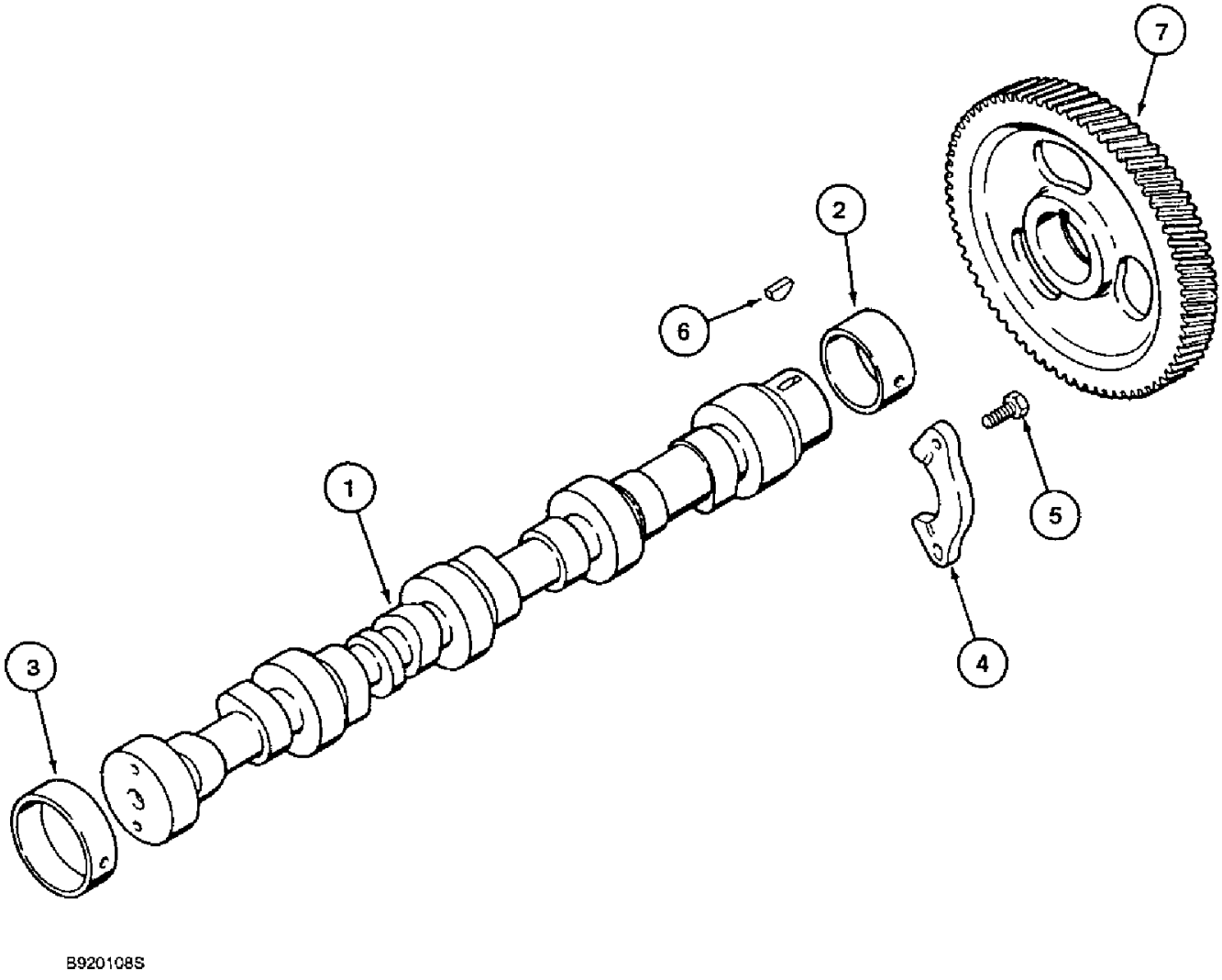


CYLINDER HEAD AND VALVE MECHANISM, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
16	1	J906206		8	GUIDE - valve, intake and exhaust, service repair only, 11 mm OD
17		J920779		4	SPECIAL BOLT BOLT, SPECIAL - cylinder head, 70 mm long
17		J920780		10	SCREW - cylinder head, 120 mm long
18		J910814		4	SUPPORT AND SHAFT ASSEMBLY - rocker arm
18A		J907555		1	PLUG - rocker arm shaft, not shown
19		J900242		8	SNAP RING RING - retaining, rocker arm
20		J900245		8	WASHER - thrust, rocker arm
21		J910811		4	ROCKER ARM ASSEMBLY - rocker, intake
22		NSS		1	NOT SERVICED SEPARATELY INSERT - rocker arm
23		J937438		1	SET SCREW Hex Skt, 3/8"-24 x 33mm, Adj, Ball Point SCREW - slotted set, adjusting, special
24		425-116		1	NUT 3/8"-24, G5 - hex, 3/8 inch NF
25		J910810		4	ROCKER ARM ASSEMBLY - rocker, exhaust
26		NSS		1	NOT SERVICED SEPARATELY INSERT - rocker arm
27		J937438		1	SET SCREW Hex Skt, 3/8"-24 x 33mm, Adj, Ball Point SCREW - slotted set, adjusting, special
28		425-116		1	NUT 3/8"-24, G5 - hex, 3/8 inch NF
29		814-8075		4	BOLT Hex, M8 x 75, 8.8
30		J920781		4	SPECIAL BOLT BOLT, SPECIAL - rocker arm and cylinder head, 180 mm long
31		J923262		8	PUSH ROD ROD - push, rocker arm, replaces J904679 rod
32		J925031		8	TAPPET - valve, push rod, replaces J907240 tappet

(1) These parts are semi-finished valve guides.

CAMSHAFT, 4-390 ENGINE, 4T-390 ENGINE

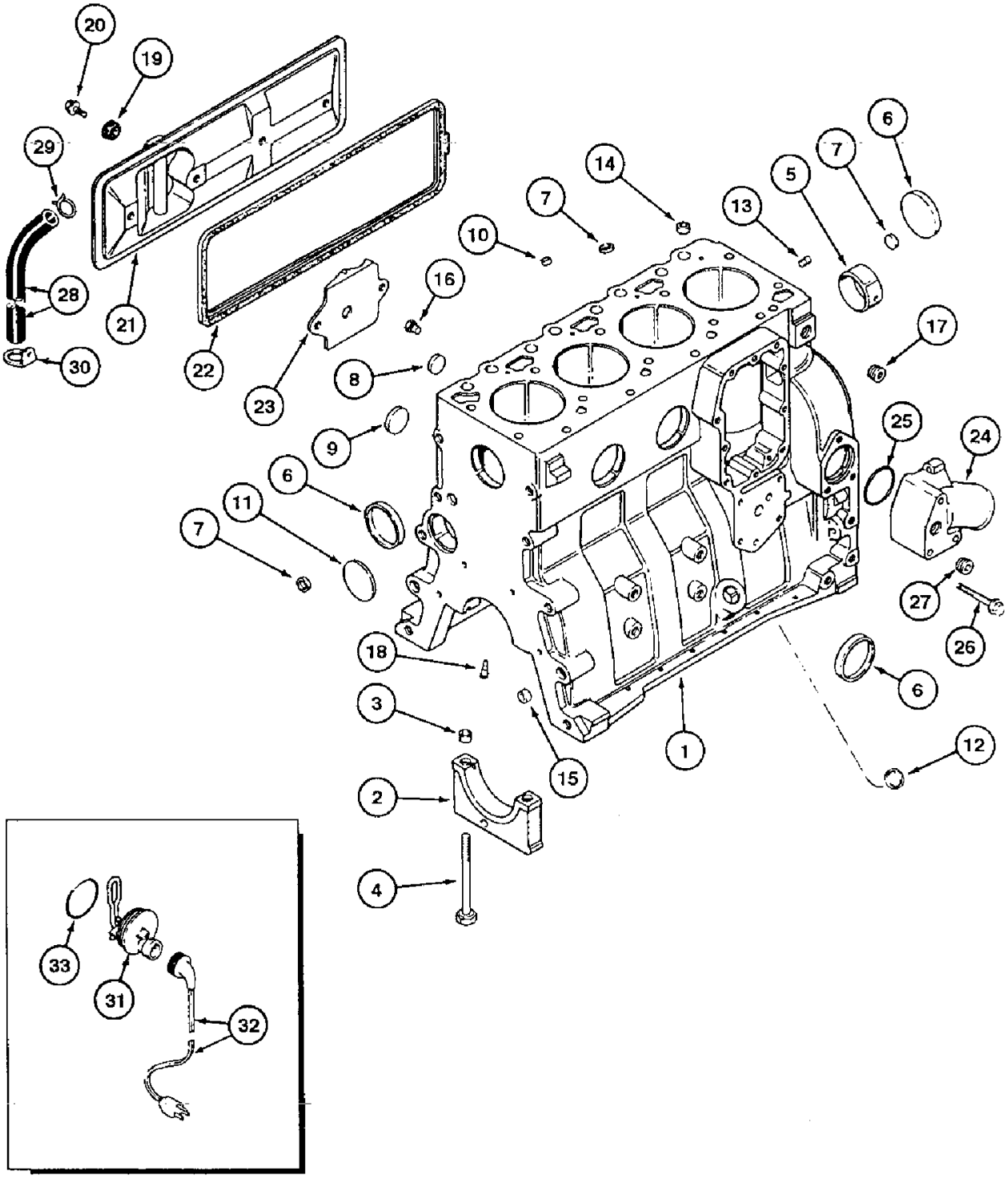


CAMSHAFT, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		J929039		1	CAMSHAFT - engine, replaces J914638 and J925582 camshaft
		J929039R		1	REMAN-CAMSHAFT 550E LONG TRACK CRAWLER TRACTOR
		J929039C			CORE-CAMSHAFT Return Number
2		J901306		1	BUSHING - camshaft, front, standard
2		J904369		1	BUSHING - camshaft, front, oversize, 58 mm OD
3	1	J903242		4	BUSHING - camshaft, intermediate and rear, service repair only
4		J927155		1	SUPPORT - thrust, camshaft, replaces J914641 support
5		J900227		2	SCREW Hex, M8 x 1.25 x 22
6		126-112		1	WOODRUFF KEY #6, 5/32" x 5/8", HT Replaces J902332 key #6, 5/32" x 5/8", HT
7		J907431		1	CAMSHAFT BEARING GEAR - camshaft

(1) When the intermediate and rear cylinder block camshaft bores are reamed in engine repair, order and install item 3,

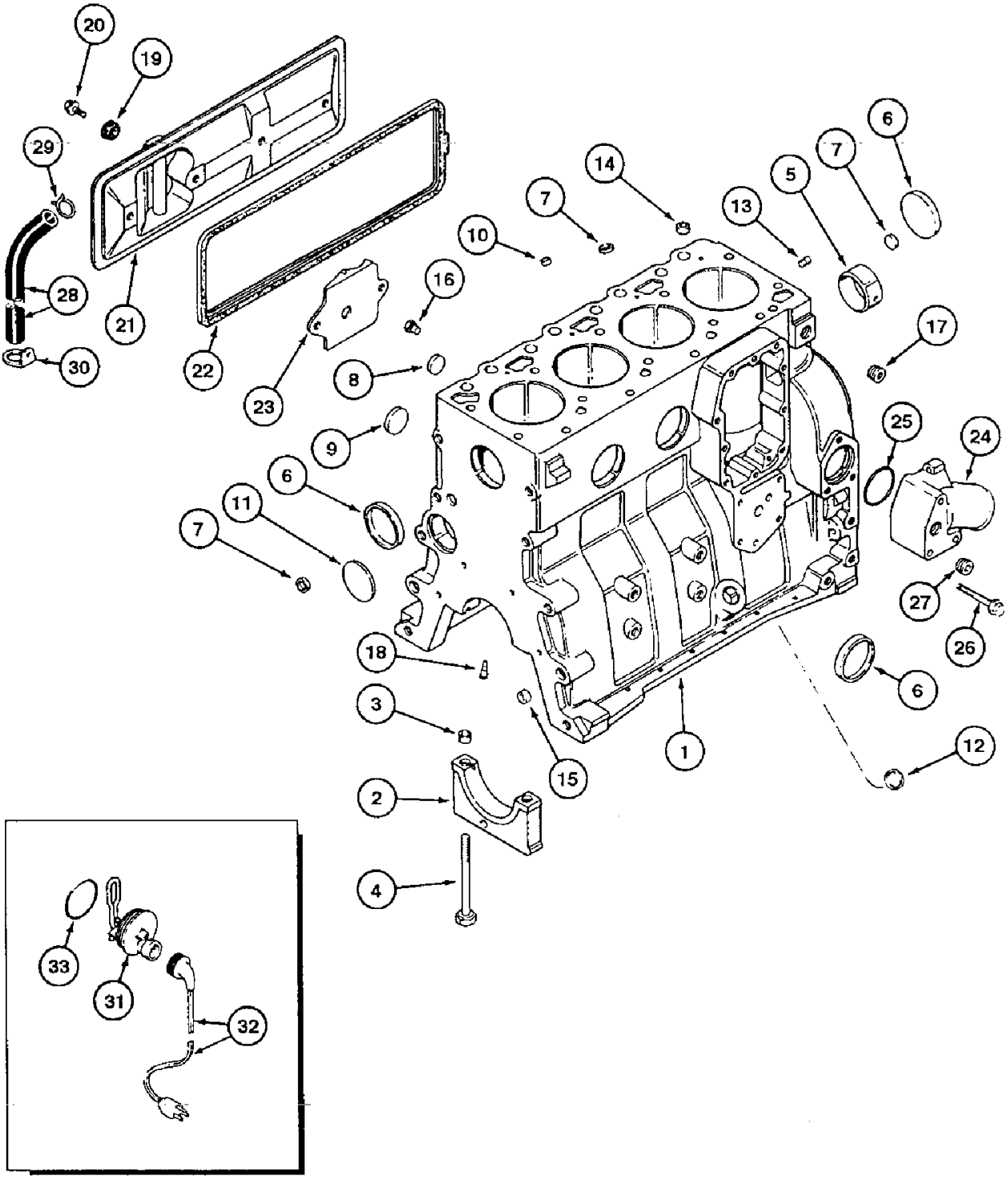
CYLINDER BLOCK, 4-390 ENGINE



CYLINDER BLOCK, 4-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		1989046C2		1	ENGINE ASSEMBLY ENGINE ASSY ENGINE ASSEMBLY - complete, 4-390, includes all parts except starter, alternator, fan, fan belt, air cleaner, muffler and exhaust pipe, for service order basic engine below
		1989046C2R		1	REMAN-REPLACEMENT ENGINE Remanufactured, For N.A. Only
		4-390C		1	CORE-REPLACEMENT ENGINE Return Number, Complete, For N.A. Only
		1989091C2R		1	ENGINE, EXCHANGE ENGINE (EXCHANGE) ENGINE ASSEMBLY - remanufactured, North America only, component parts shown on this figure do not apply to the remanufactured assembly
		1989091C2C		1	CORE-ENGINE RETURN NUMBER - use this part number to return engine assembly core for credit when using a remanufactured assembly
		1989091C3R		1	REMAN-BASIC ENGINE Remanufactured, For N.A. Only
		1989091C2		1	BASIC ENGINE ENGINE ASSEMBLY - basic, includes all parts except starter, alternator, fan, fan belt, air cleaner, muffler, exhaust manifold, flywheel and housing, oil fill and dipstick, fuel injection pump, injectors and lines, front crank pulley and belt tensioner
		JR933238		1	REMAN-SHORT ENGINE Remanufactured, For N.A. Only
		JC933238		1	CORE-SHORT ENGINE Return Number, For N.A. Only

CYLINDER BLOCK, 4-390 ENGINE



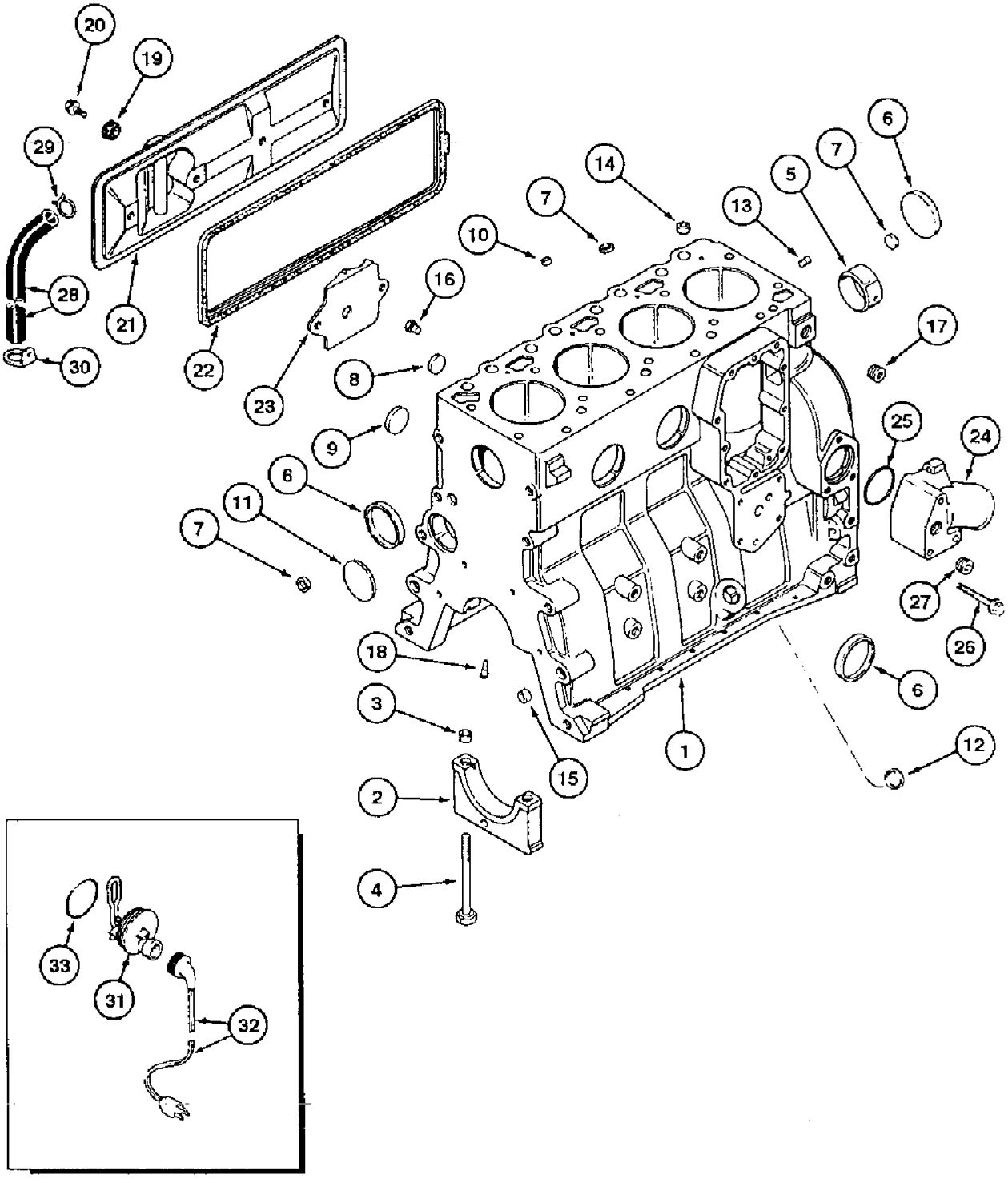
B9501046

CYLINDER BLOCK, 4-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		AR77758		1	BLOCK ASSY. BLOCK ASSEMBLY - short, remanufactured, North America only, component parts shown on this figure do not apply to the remanufactured assembly, no longer available, order JR920384 remanufactured short block
		AC77758		1	CORE-ENGINE RETURN NUMBER - use this part number to return short block core for credit when using a remanufactured assembly
		A77758		1	SKELETON ENGINE KIT - short block, no longer available, order J920384 short block and J920399 hardware kit
	1	J920384		1	BLOCK ASSY. BLOCK ASSEMBLY - short, engine, new, includes stripped block, pistons, connecting rods and bearings, crankshaft and bearings
		A77757		1	CRANKCASE KIT - stripped block, no longer available, order J916254 stripped block and J920399 hardware kit
1	1	J916254		1	BLOCK ASSY. BLOCK ASSEMBLY - stripped, engine
2		J900967		5	BEARING CAP CAP - main bearing
3		J900068		10	BEARING WASHER RING - dowel, 18 mm OD
4		J904217		10	BOLT BOLT - main bearing cap, special
5		REF		1	INSTRUCTION BUSHING - camshaft front, see figure 2-20, item 2
6		A77782		4	PLUG PLUG - expansion, 58 mm OD
7		J900956		3	PLUG PLUG - expansion, 18 mm OD
8		41-1616		2	PLUG Cup, 1", Stainless PLUG, , Replaces A77539 plug Cup, 1", Stainless
	1	{J920399}		1	KIT - block hardware
9		J900958		2	PLUG PLUG - expansion, 32 mm OD
10		J900955		1	PLUG PLUG - expansion, 10 mm OD
11		172599		1	PLUG Exp, 2 3/8" PLUG - expansion, Welch, 60 mm OD, replaces J900687 plug
12		J920706		1	PLUG PLUG - expansion, 22 mm OD, replaces A77439 plug
13		J900257		2	PIN PIN - dowel, 16 mm long

(1) Order J920399 hardware kit when ordering J920384 block assembly or J916254 stripped block.

CYLINDER BLOCK, 4-390 ENGINE

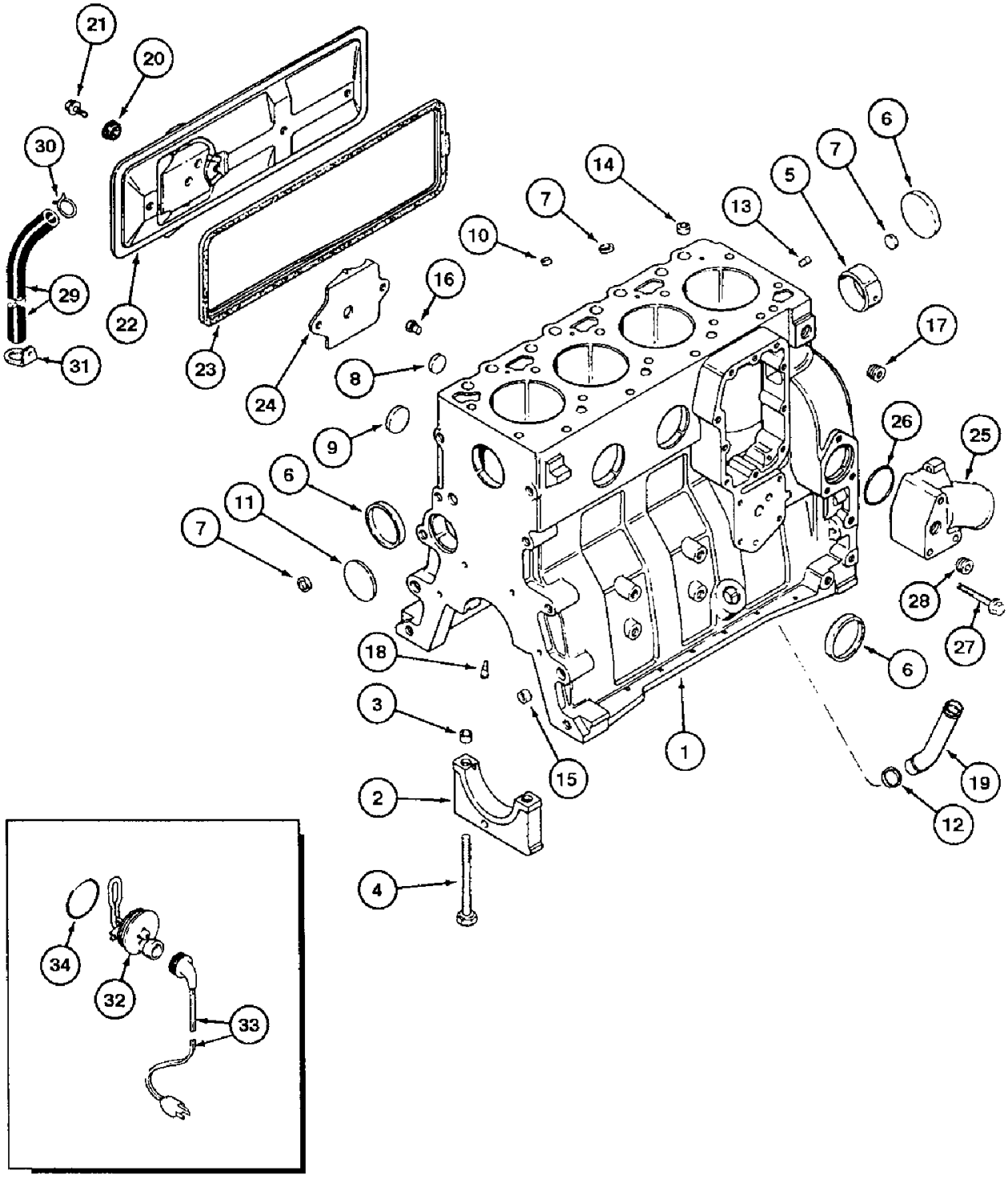


B9501046

CYLINDER BLOCK, 4-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
14		J902343		2	DOWEL RING - dowel, 16 mm OD
15		J900068		2	BEARING WASHER RING - dowel, 18 mm OD
16		J906619		2	PLUG PLUG - hex, 1/8 inch PT
17		A77429		1	PLUG PLUG - hex socket, 1/2 inch PT
18		J919002		4	NOZZLE CAP
19		J900267		4	SEAL SEAL - cover bolt
20		845-8020		4	BOLT Hex Flg, M8 x 20, 8.8, Full Thd BOLT - heavy hex flange, 8 - 1.25 x 20 mm
21		J925680		1	COVER COVER - tappet
22		J928831		1	GASKET GASKET - tappet cover, replaces J922078 gasket
23		J907586		1	BAFFLE BAFFLE - tappet cover
24		J903102		1	CONNECTION CONNECTION - water inlet
25		J906697		1	SEAL O-RING - sealing, 50 mm ID
26		854-10075		3	BOLT Hex Flg, M10 x 75, 10.9 BOLT - heavy hex flange, 10 - 1.5 x 75 mm, class 10.9
27		A77429		2	PLUG PLUG - hex socket, 1/2 inch PT
28		J918612		1	HOSE 360.00 mm
29		J904230		1	CLAMP CLAMP - hose
30		J909670		1	CLIP CLIP - retaining
		A77634		1	KIT KIT - engine block heater
31		NSS		1	NOT SERVICED SEPARATELY ELEMENT - engine heater, 120 volt
32		J905113		1	CABLE CABLE - engine block heater, 6 feet long
33		J910517		1	O-RING O-RING - heater sealing, engine block

CYLINDER BLOCK, 4T-390 ENGINE



B9401005

CYLINDER BLOCK, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		1989047C2		1	ENGINE ASSEMBLY ENGINE ASSY ENGINE ASSEMBLY - complete, 4T-390, includes all parts except starter, alternator, fan, fan belt, air cleaner, muffler and exhaust pipe, for service order basic engine below, for service order 1989092C2 basic engine below
		1989092C3R		1	REMAN-BASIC ENGINE Remanufactured, For N.A. Only
	1	1989092C2		1	BASIC ENGINE
		1989092C2R		1	ENGINE, EXCHANGE ENGINE (EXCHANGE) ENGINE ASSEMBLY - remanufactured, North America only, component parts shown on this figure do not apply to the remanufactured assembly
		1989092C2C		1	CORE-ENGINE RETURN NUMBER - use this part number to return basic engine core for credit when using a remanufactured assembly
		AR77759		1	SKELETON ENGINE BLOCK ASSEMBLY - short, remanufactured, North America only, component parts on this figure do not apply to the remanufactured assembly, no longer available, for service order J920387 block assembly
		AC77758		1	CORE-ENGINE RETURN NUMBER - use this part number to return short block core for credit when using a remanufactured assembly
	2	J920387		1	SKELETON ENGINE BLOCK ASSEMBLY - short, new, includes stripped block, pistons, connecting rods and bearings, crankshaft and bearings
		JR933236		1	REMAN-SHORT ENGINE Remanufactured, For N.A. Only

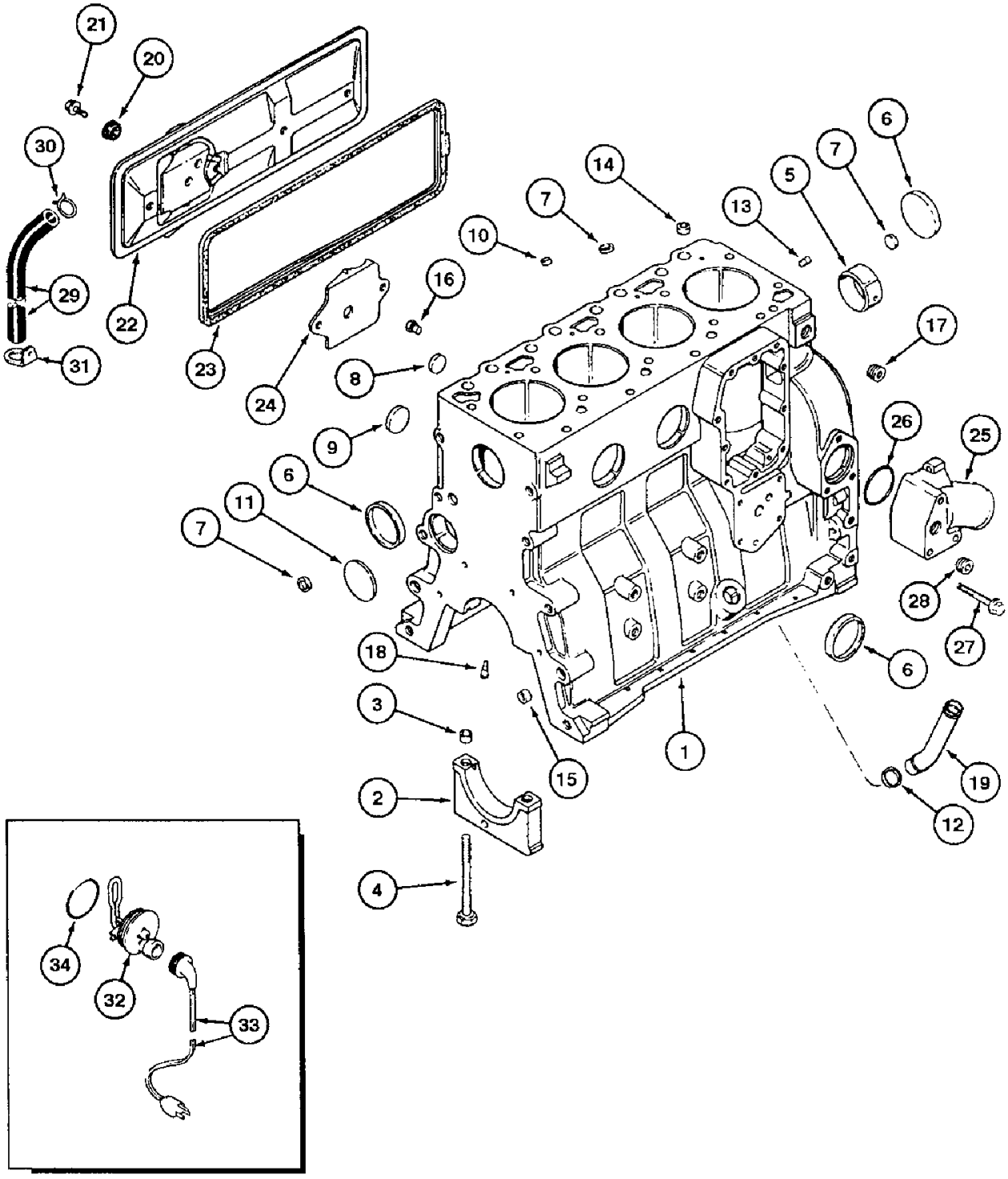
(1) ENGINE ASSEMBLY basic, includes all parts except starter, alternator, fan, fan belt, air cleaner, muffler, exhaust

(2) Order J920399 hardware kit when ordering J920387 block assembly or J916254 stripped block.

IF DEALER IS LOOKING FOR A REMAN EQUIVALENT TO 1989047C2 COMPLETE ENGINE ASSEMBLY, ORDER 1989068C2 580SK ENGINE, FOR USE IN A 550E, ROTATE OIL PAN 180 DEGREES, USE OIL FILLER TUBE FROM 550E, RECALIBRATE INJECTION PUMP PER 550E SERVICE MANUAL

550E

CYLINDER BLOCK, 4T-390 ENGINE



B9401005

CYLINDER BLOCK, 4T-390 ENGINE

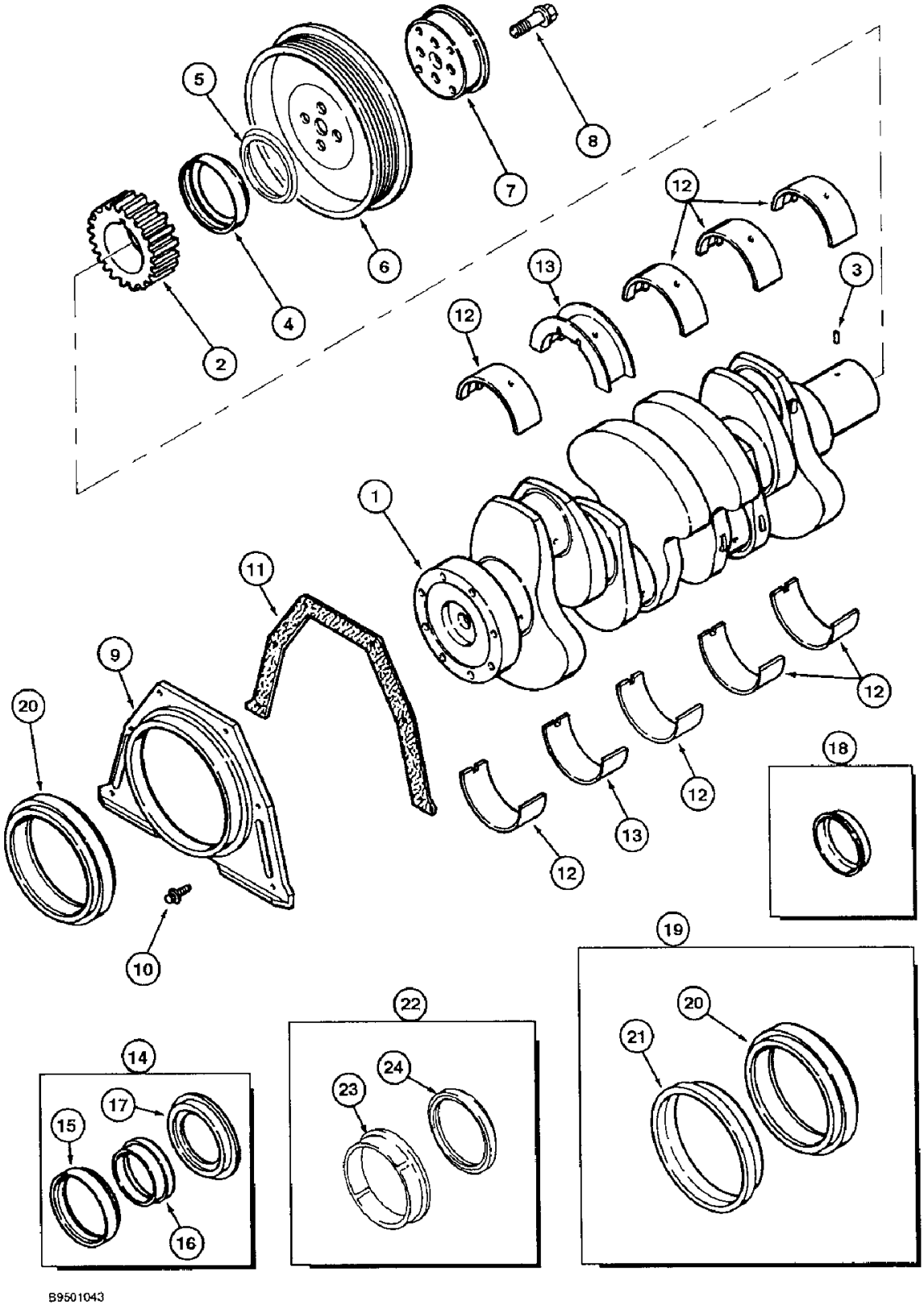
REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		JC933236		1	CORE-SHORT ENGINE Return Number, For N.A. Only
1	1	J916254		1	BLOCK ASSY. BLOCK ASSEMBLY - stripped, engine
2		J900967		5	BEARING CAP CAP - main bearing
3		J900068		10	BEARING WASHER RING - dowel, 18 mm OD, main bearing
4		J904217		10	BOLT BOLT - main bearing cap, special
5		REF		1	INSTRUCTION BUSHING - camshaft front, see figure 2-20, item 2
6		A77782		1	PLUG PLUG - expansion, 58 mm OD
7		J900956		3	PLUG PLUG - expansion, 18 mm OD
8		41-1616		2	PLUG Cup, 1", Stainless PLUG, , Replaces A77539 plug Cup, 1", Stainless
	1	{J920399}		1	KIT - block hardware
9		J900958		2	PLUG PLUG - expansion, 32 mm OD
10		J900955		1	PLUG PLUG - expansion, 10 mm OD
11		172599		1	PLUG Exp, 2 3/8" PLUG - expansion, Welch, 60 mm OD, replaces J900687 plug
12		J920706		1	PLUG PLUG - expansion, 22 mm OD, replaces A77439 plug, not used in this application, item 19, J903744 turbocharger oil drain tube is installed in this port
13		J900257		2	PIN PIN - dowel, 16 mm long, locating
14		J902343		2	DOWEL RING - dowel, 16 mm OD
15		J900068		2	BEARING WASHER RING - dowel, 18 mm OD
16		J906619		2	PLUG PLUG - hex, 1/8 inch PT
17		A77429		1	PLUG PLUG - hex socket, 1/2 inch PT
18		J919002		4	NOZZLE CAP NOZZLE - piston cooling
19		J903744		1	PIPE FITTING 22.42 mm ID x 28 mm OD x 90.2, 64 mm L TUBE - turbocharger oil drain
20		J900267		4	SEAL SEAL - cover bolt

(1) Order J920399 hardware kit when ordering J920387 block assembly or J916254 stripped block.

IF DEALER IS LOOKING FOR A REMAN EQUIVALENT TO 1989047C2 COMPLETE ENGINE ASSEMBLY, ORDER 1989068C2 580SK ENGINE, FOR USE IN A 550E, ROTATE OIL PAN 180 DEGREES, USE OIL FILLER TUBE FROM 550E, RECALIBRATE INJECTION PUMP PER 550E SERVICE MANUAL

550E

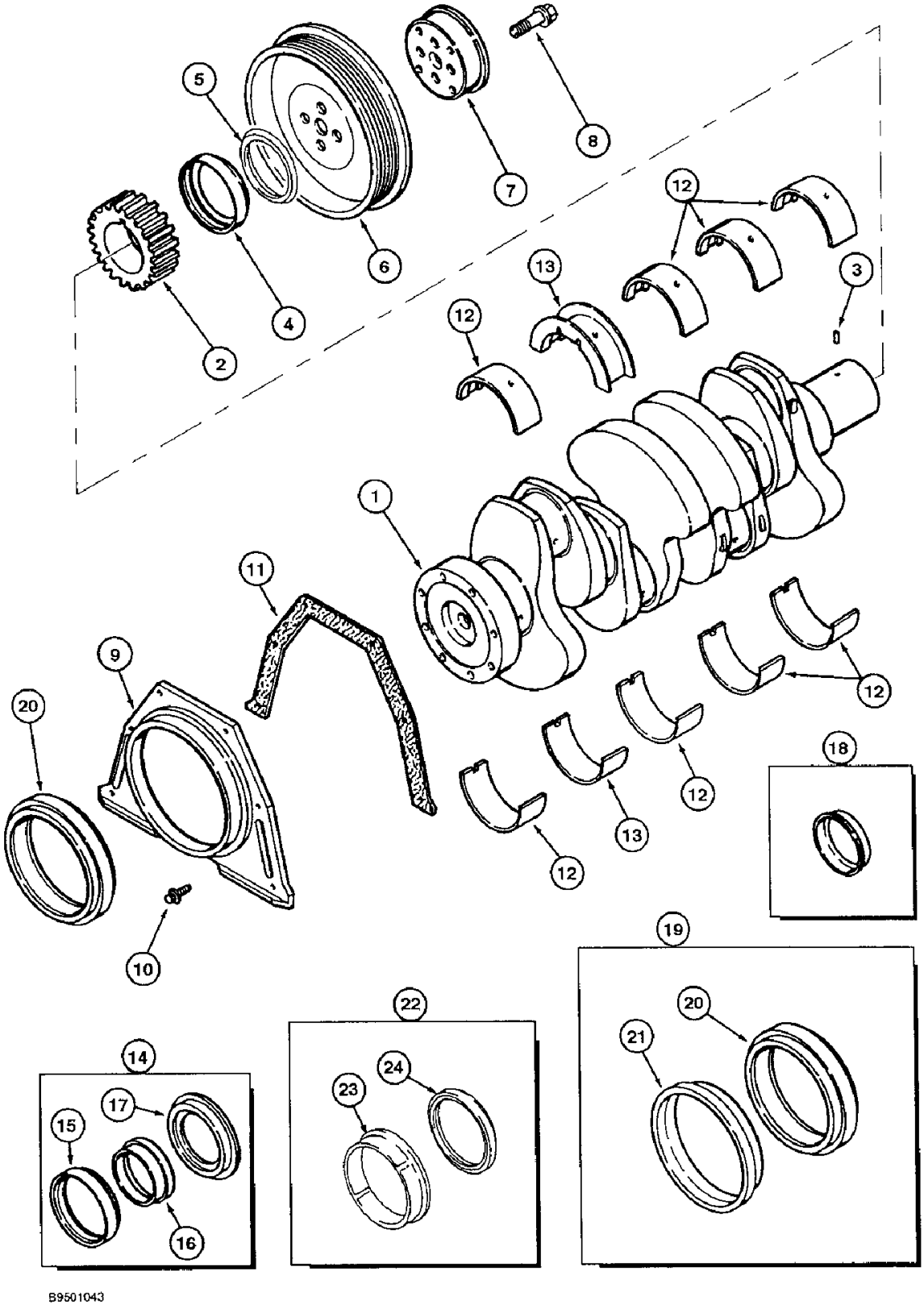
CRANKSHAFT, 4-390 ENGINE, 4T-390 ENGINE



CRANKSHAFT, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		JR908031		1	CRANKCASE CRANKSHAFT - engine, remanufactured, North America only, component parts shown on this figure do not apply to the remanufactured assembly, replaces JR918323 crankshaft, for service order J918323 crankshaft assembly, item 1
		J929036R		1	REMAN-CRANKSHAFT 550E, Reman for New P/N JR908031
		J929036C			CORE-CRANKSHAFT Return Number
		JC908031		1	CORE-CRANKSHAFT RETURN NUMBER - use this part number to return crankshaft for credit when using a remanufactured assembly
1		J918323		1	CRANKSHAFT ASSEMBLY - engine, new
		J929036R		1	REMAN-CRANKSHAFT 550E, Reman for New P/N J918323
		J929036C			CORE-CRANKSHAFT Return Number
2		J929027		1	PINION GEAR - crankshaft, replaces J919681 gear
3		J904483		1	PIN - dowel
4		NSS		1	NOT SERVICED SEPARATELY SEAL - oil, crankshaft front, order item 14 kit
5		J926430		1	SHAFT SEAL SEAL - dust, crankshaft, service repair only
6		J914494		1	PULLEY - crankshaft vibration damper
7		J905820		1	SPACER FLANGE - adapter, pulley
8		J903857		4	BOLT - hex flange, special, 12 - 1.25 x 36 mm
9		J921043		1	REAR COVER RETAINER - seal, rear cover
10		845-6015		6	BOLT Hex Flg, M6 x 15, 8.8, Full Thd
11		J928493		1	GASKET - rear cover retainer, replaces J914386 gasket
12		A77405		6	CRANKSHAFT BEARING BEARING - main, upper and lower set, standard

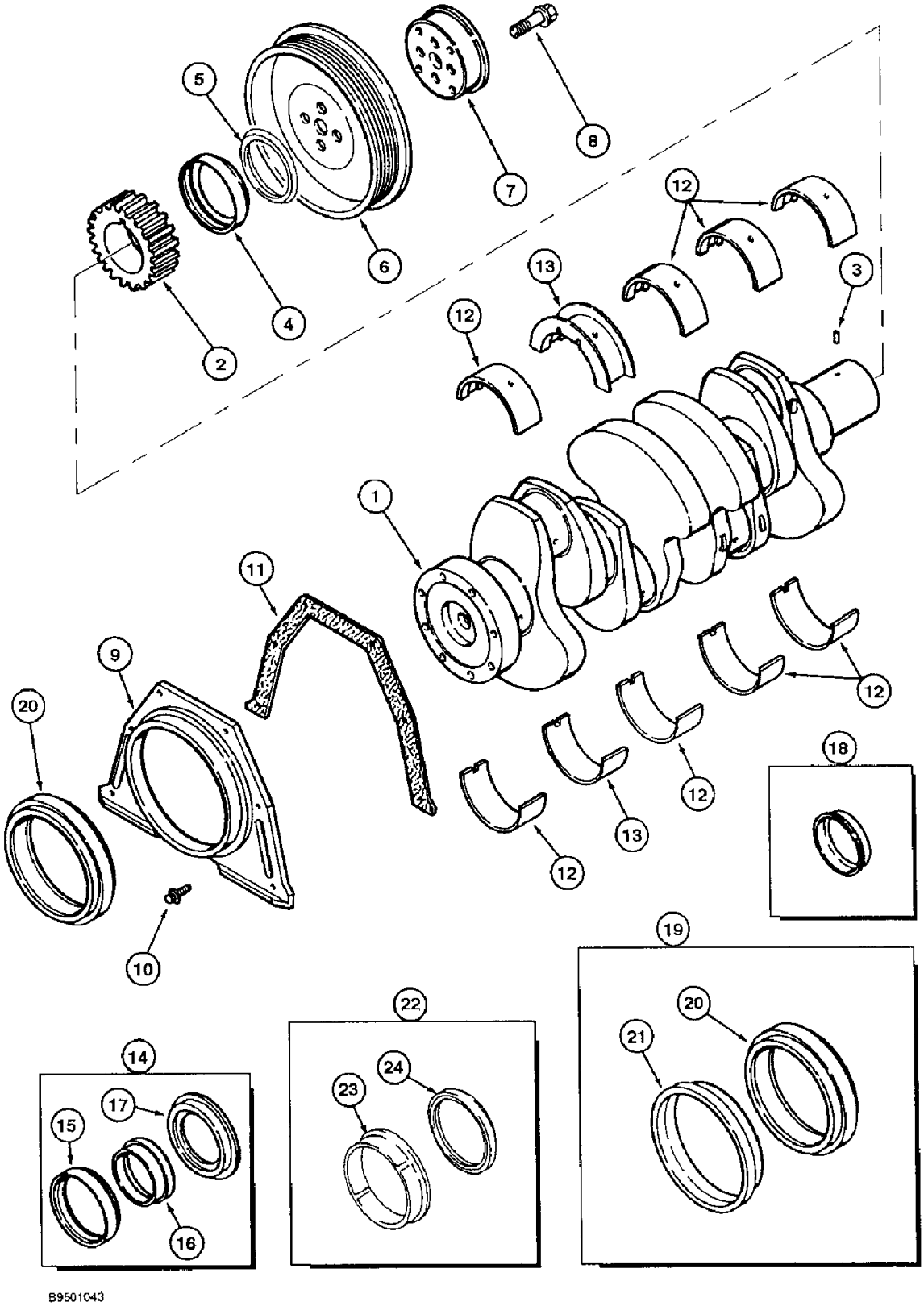
CRANKSHAFT, 4-390 ENGINE, 4T-390 ENGINE



CRANKSHAFT, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
12		A77472		6	BEARING SET BEARING - main, upper and lower set, 0.25 mm undersize
12		A77474		6	BEARING SET BEARING - main, upper and lower set, 0.50 mm undersize
12		A77476		6	BEARING SET BEARING - main, upper and lower set, 0.75 mm undersize
12		A77478		6	BEARING SET BEARING - main, upper and lower set, 1.0 mm undersize
13		A77406		1	CRANKSHAFT BEARING BEARING - main thrust, upper and lower set, standard
13		A77473		1	THRUST BEARING BEARING - main thrust, upper and lower set, 0.25 mm undersize
13		A77475		1	THRUST BEARING BEARING - main thrust, upper and lower set, 0.50 mm undersize
13		A77477		1	THRUST BEARING BEARING - main thrust, upper and lower set, 0.75 mm undersize
13		A77479		1	THRUST BEARING BEARING - main thrust, upper and lower set, 1.00 mm undersize
13		A77841		1	THRUST BEARING BEARING - main thrust, upper and lower set, 0.50 mm undersize, 0.50 mm oversize thrust
13		A77840		1	THRUST BEARING BEARING - main thrust, upper and lower set, 1.00 mm undersize, 1.00 mm oversize thrust
14		J904353		1	GASKET KIT KIT - oil seal, crankshaft front
15		NSS		1	NOT SERVICED SEPARATELY SEAL - oil, front
16		NSS		1	NOT SERVICED SEPARATELY TOOL - installation
17		NSS		1	NOT SERVICED SEPARATELY TOOL - installation
18		J906080		1	PACKAGE, REPAIR SLEEVE - wear, crankshaft front

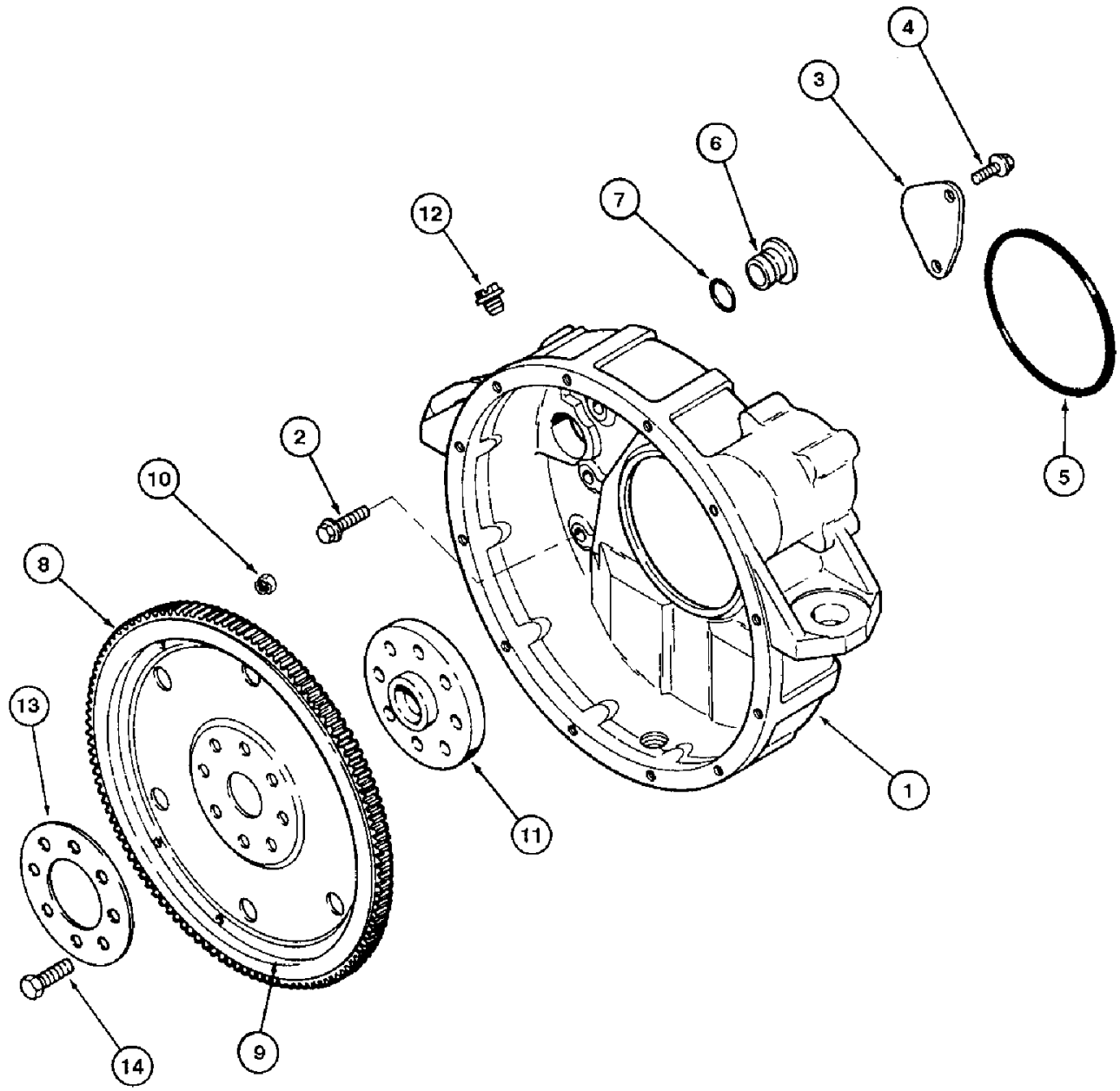
CRANKSHAFT, 4-390 ENGINE, 4T-390 ENGINE



CRANKSHAFT, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
19		A77809		1	GASKET KIT KIT - oil seal, crankshaft rear, replaces J909410 kit; Incl 20, 21
20		NSS		1	NOT SERVICED SEPARATELY SEAL - oil, rear
21		NSS		1	NOT SERVICED SEPARATELY SLEEVE - installation
22		A77810		1	SERVICE KIT KIT - wear sleeve, crankshaft rear, replaces J906081 kit; Incl 23, 24
23		NSS		1	NOT SERVICED SEPARATELY SLEEVE - wear
24		NSS		1	NOT SERVICED SEPARATELY SEAL - oil, rear

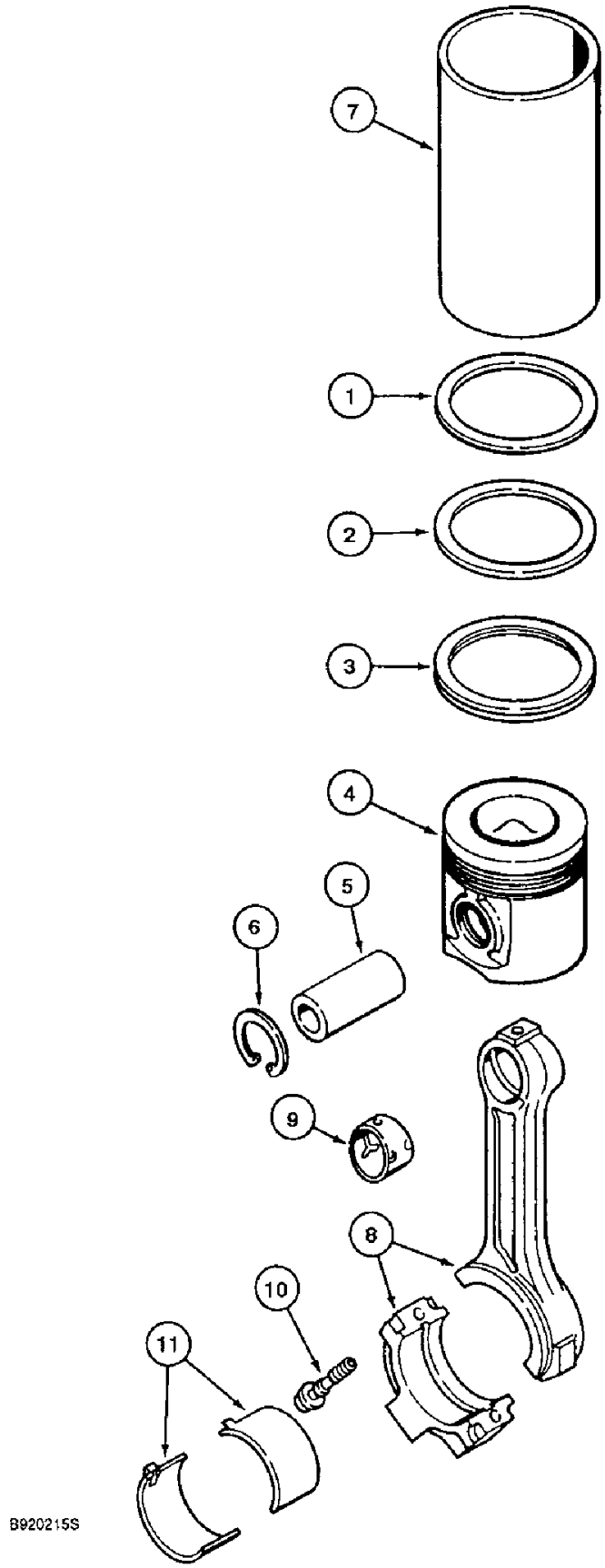
FLYWHEEL AND HOUSING, 4-390 ENGINE, 4T-390 ENGINE



FLYWHEEL AND HOUSING, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		J903287		1	CASE HOUSING - flywheel
2		854-12040		8	BOLT Hex Flg, M12 x 40, 10.9 - heavy hex flange, 12 - 1.75 x 40 mm, class 10.9
3		J908095		1	PLATE - cover
4		J902735		2	BOLT - hex flange, self tapping, 8 - 1.25 x 21 mm, plate retaining
5		J912473		1	SEAL O-RING - flywheel
6		J910248		1	PLUG - flywheel housing
7		238-5212		1	O-RING -212, 70 Duro, .859" ID x .139" Thk
		J922595		1	FLYWHEEL PLATE ASSEMBLY - flex
8		NSS		1	NOT SERVICED SEPARATELY GEAR - ring, flywheel
9		NSS		1	NOT SERVICED SEPARATELY PLATE - flex
10		NSS		6	NOT SERVICED SEPARATELY NUT - sealing
11		J913689		1	FLANGE ADAPTER - crankshaft
12		353-225		1	PLUG Sltd Hd, 3/4"-16 - slotted hex, 3/4 inch NF
13		J904361		1	WASHER RING - clamping
14		J901395		8	SCREW Hex, M12 x 1.25 x 32, Spc BOLT - hex, special, 12 - 1.25 x 32 mm

PISTONS, 4-390 ENGINE

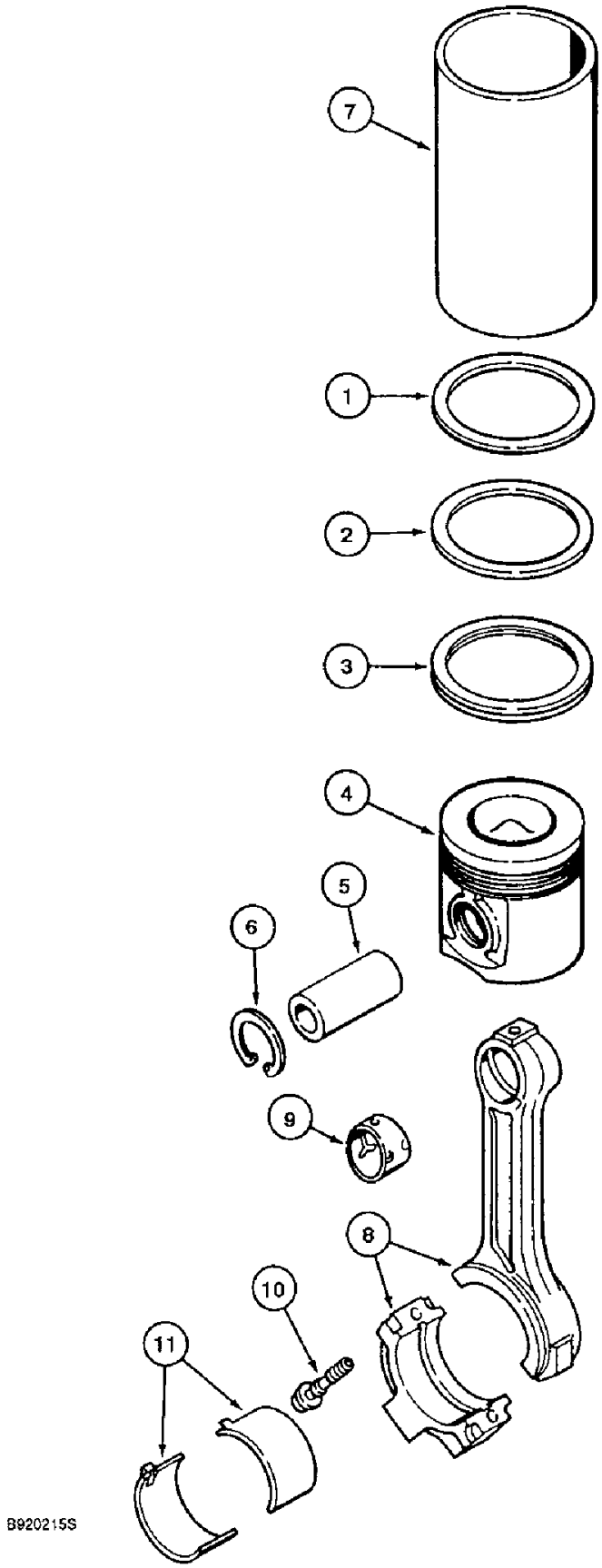


PISTONS, 4-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		A77410		4	PISTON KIT - piston, standard
		A77401		1	PISTON RING SET KIT - ring, standard
1		NSS		1	NOT SERVICED SEPARATELY RING - compression, top
2		NSS		1	NOT SERVICED SEPARATELY RING - compression, middle
3		NSS		1	NOT SERVICED SEPARATELY RING - oil, bottom
4		NSS		1	NOT SERVICED SEPARATELY PISTON - cylinder, standard (Stamped 6223)
5		J901793		1	PISTON PIN PIN - piston
6		J901706		2	RING - snap
		A77411		4	PISTON KIT - piston, 0.5 mm oversize
		A77463		1	PISTON RING SET KIT - ring, 0.5 mm oversize
1		NSS		1	NOT SERVICED SEPARATELY RING - compression, top
2		NSS		1	NOT SERVICED SEPARATELY RING - compression, middle
3		NSS		1	NOT SERVICED SEPARATELY RING - oil, bottom
4		NSS		1	NOT SERVICED SEPARATELY PISTON - cylinder, 0.5 mm oversize (Stamped 6209)
5		J901793		1	PISTON PIN PIN - piston
6		J901706		2	RING - snap
		A77412		4	PISTON KIT - piston, 1.0 mm oversize
		A77464		1	PISTON RING SET KIT - ring, 1.0 mm oversize
1		NSS		1	NOT SERVICED SEPARATELY RING - compression, top
2		NSS		1	NOT SERVICED SEPARATELY RING - compression, middle
3		NSS		1	NOT SERVICED SEPARATELY RING - oil, bottom

A77410/411/412 are short pin piston kits, stamped 6223, 6209, and 6208 on piston. A77818/819/820 are long pin piston kits, stamped 1880, 1882, 1881 on piston, do not mix.

PISTONS, 4-390 ENGINE

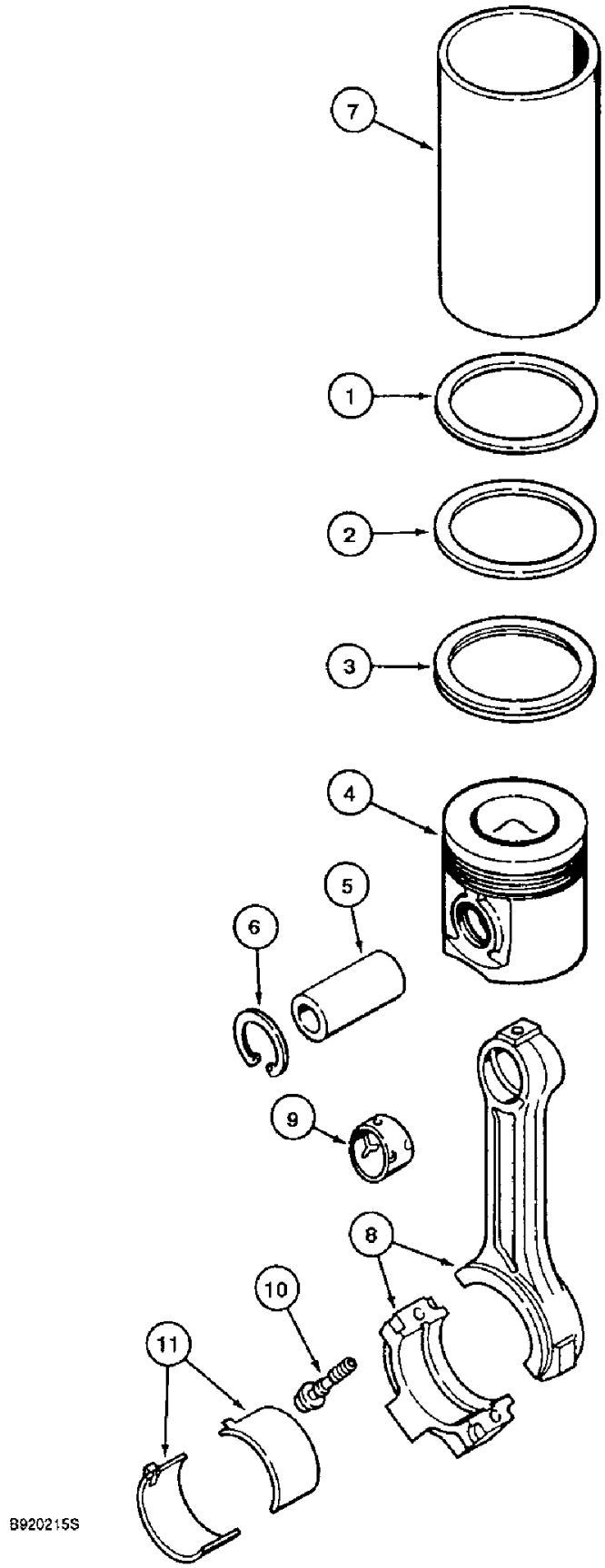


PISTONS, 4-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
4		NSS		1	NOT SERVICED SEPARATELY PISTON - cylinder, 1.0 mm oversize (Stamped 6208)
5		J901793		1	PISTON PIN PIN - piston
6		J901706		2	RING - snap
7		J904166		UAR	SLEEVE LINER - piston, used only in engine block repair (When liner is installed, use A77818 piston kit)
		J925232		4	ROD, CONNECTING ROD ASSEMBLY - connecting, new, replaces J901569 rod assembly
		{84145405R}		4	550E, Reman For New P/N J925232
		84145405C			CORE-ROD CONNECTING Return Number
		JR925232		UAR	ROD ASSEMBLY - connecting, remanufactured, North America only, component parts shown on this figure do not apply to the remanufactured assembly, replaces JR901569 rod assembly
		JC925232		UAR	CORE-ROD CONNECTING RETURN NUMBER - use this part number to return connecting rod for credit when using a remanufactured assembly, replaces JC901569
		JR942581		UAR	REMAN-CONNECTING ROD Remanufactured CONNECTING ROD - N.A. Only
		JC901569		UAR	CORE-ROD CONNECTING Return No, CONNECTING ROD - N.A. Only
8		NSS		1	NOT SERVICED SEPARATELY ROD - connecting, includes both halves
9		J901085		1	BUSHING - connecting rod
10		J900919		2	SCREW BOLT - hex, special, connecting rod
11		A77465		4	BEARING LINER KIT - bearing, upper and lower set, standard, connecting rod
11		A77466		4	BEARING SET KIT - bearing, upper and lower set, 0.25 mm undersize, connecting rod
11		A77467		4	BEARING SET KIT - bearing, upper and lower set, 0.50 mm undersize, connecting rod

A77410/411/412 are short pin piston kits, stamped 6223, 6209, and 6208 on piston. A77818/819/820 are long pin piston kits, stamped 1880, 1882, 1881 on piston, do not mix.

PISTONS, 4-390 ENGINE

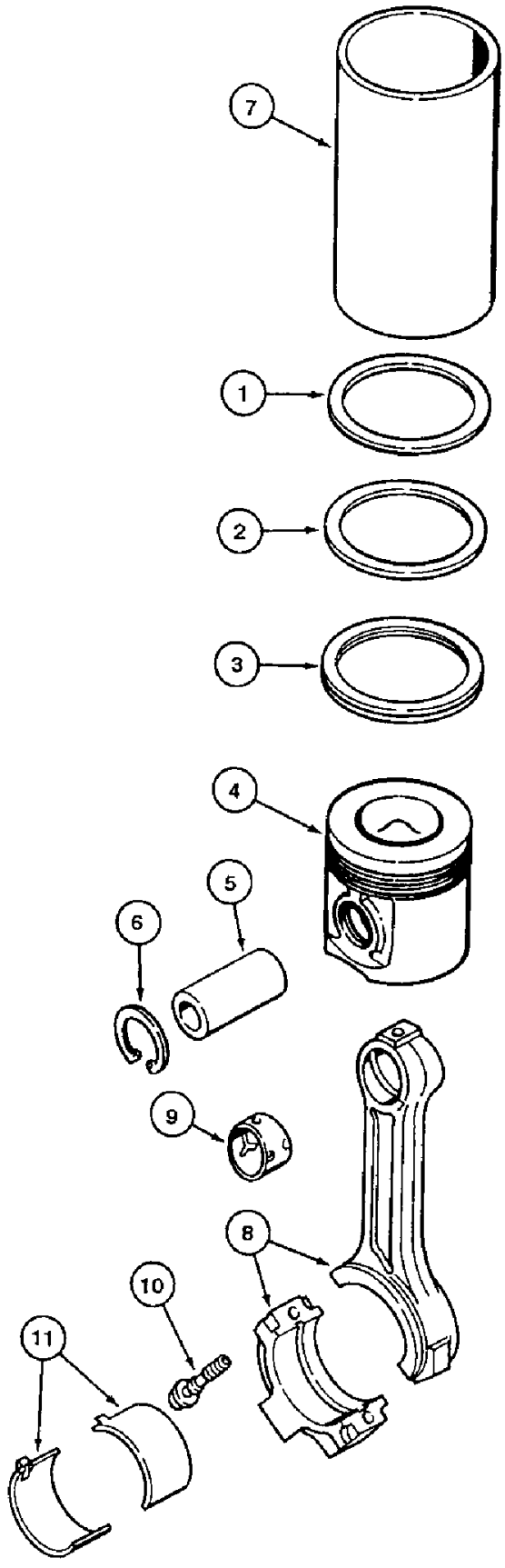


PISTONS, 4-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
11		A77468		4	BEARING SET KIT - bearing, upper and lower set, 0.75 mm undersize, connecting rod
11		A77469		4	BEARING SET KIT - bearing, upper and lower set, 1.00 mm undersize, connecting rod

A77410/411/412 are short pin piston kits, stamped 6223, 6209, and 6208 on piston. A77818/819/820 are long pin piston kits, stamped 1880, 1882, 1881 on piston, do not mix.

PISTONS, 4T-390 ENGINE

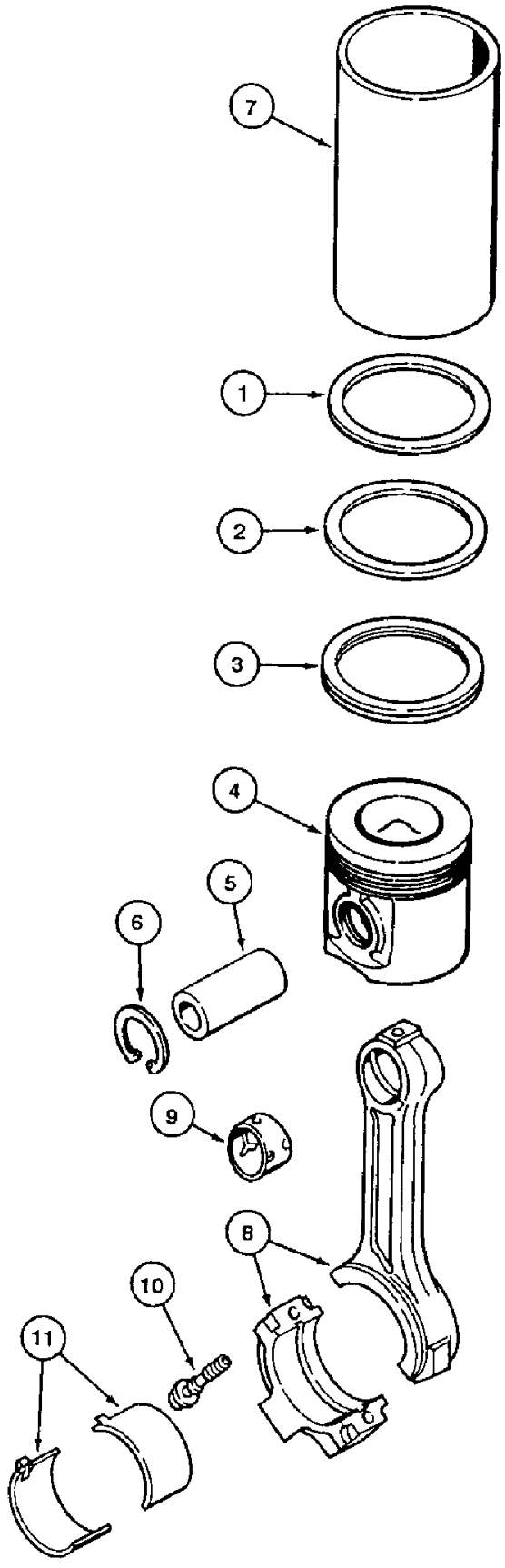


B920215S

PISTONS, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		A77730		6	PISTON KIT - piston, standard
		A77727		1	PISTON RING SET KIT - ring, standard
1		NSS		1	NOT SERVICED SEPARATELY RING - compression, top
2		NSS		1	NOT SERVICED SEPARATELY RING - compression, middle
3		NSS		1	NOT SERVICED SEPARATELY RING - oil, bottom
4		NSS		1	NOT SERVICED SEPARATELY PISTON - cylinder, standard (Stamped 7163)
5		J901793		1	PISTON PIN PIN - piston
6		J901706		2	RING - snap
		A77731		6	PISTON & RINGS KIT KIT - piston, 0.5 mm oversize
		A77728		1	PISTON RING SET KIT - ring, 0.5 mm oversize
1		NSS		1	NOT SERVICED SEPARATELY RING - compression, top
2		NSS		1	NOT SERVICED SEPARATELY RING - compression, middle
3		NSS		1	NOT SERVICED SEPARATELY RING - oil, bottom
4		NSS		1	NOT SERVICED SEPARATELY PISTON - cylinder, 0.5 mm oversize (Stamped 8815)
5		J901793		1	PISTON PIN PIN - piston
6		J901706		2	RING - snap
		A77732		1	PISTON KIT - piston, 1.0 mm oversize
		A77729		1	PISTON RING SET KIT - ring, 1.00 mm oversize
1		NSS		1	NOT SERVICED SEPARATELY RING - compression, top
2		NSS		1	NOT SERVICED SEPARATELY RING - compression, middle
3		NSS		1	NOT SERVICED SEPARATELY RING - oil, bottom

PISTONS, 4T-390 ENGINE

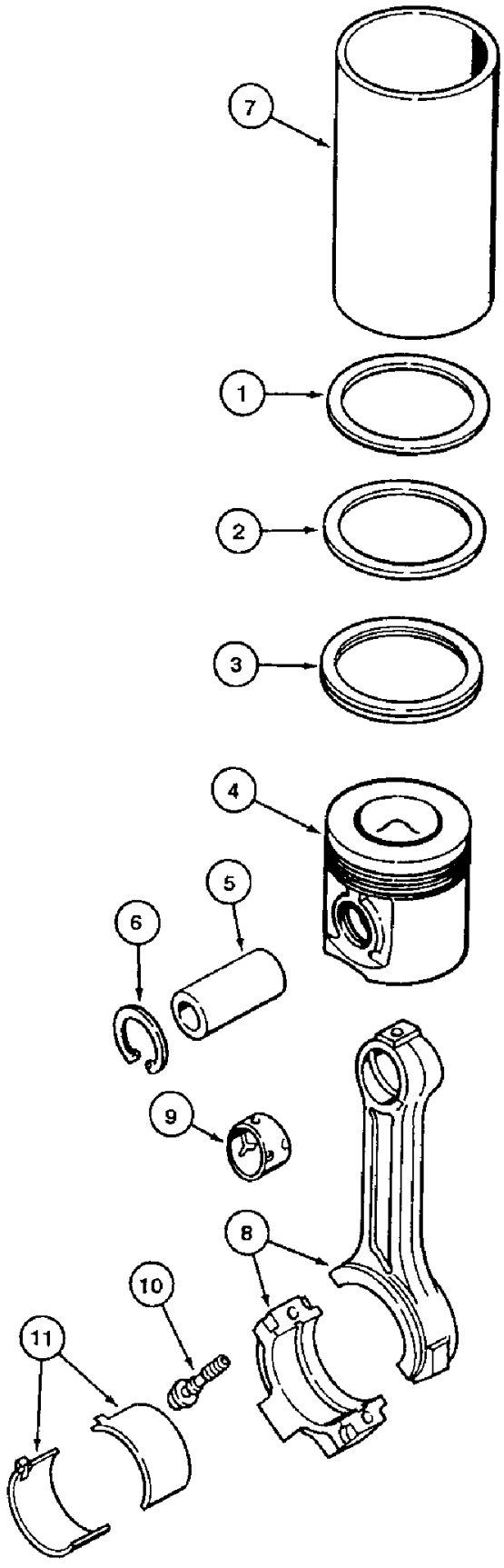


B920215S

PISTONS, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
4		NSS		1	NOT SERVICED SEPARATELY PISTON - cylinder, 1.0 mm oversize (Stamped 8816)
5		J901793		1	PISTON PIN PIN - piston
6		J901706		2	RING - snap
7		J904166		UAR	SLEEVE LINER - piston, used only in engine block repair (When liner is installed, use A77730 standard piston kit)
		JR925232		1	ROD ASSEMBLY - connecting, remanufactured, North America only, component parts shown on this figure do not apply to the remanufactured assembly, replaces JR901569 rod assembly
		JC925232		1	CORE-ROD CONNECTING RETURN NUMBER - use this part number to return connecting rod for credit when using a remanufactured assembly, replaces JC901569
		J925232		6	ROD, CONNECTING ROD ASSEMBLY - connecting, new, replaces J901569 rod assembly
		{84145405R}		6	550E, Reman For New P/N J925232
		84145405C			CORE-ROD CONNECTING Return Number
		JR942581		UAR	REMAN-CONNECTING ROD Remanufactured CONNECTING ROD - N.A. Only
		JC901569		UAR	CORE-ROD CONNECTING Return No, CONNECTING ROD - N.A. Only
8		NSS		1	NOT SERVICED SEPARATELY ROD - connecting, includes both halves
9		J901085		1	BUSHING - connecting rod
10		J900919		2	SCREW BOLT - hex, special, connecting rods
11		A77465		6	BEARING LINER KIT - bearing, upper and lower set, standard, connecting rods
11		A77466		6	BEARING SET KIT - bearing, upper and lower set, 0.25 mm undersize, connecting rods

PISTONS, 4T-390 ENGINE

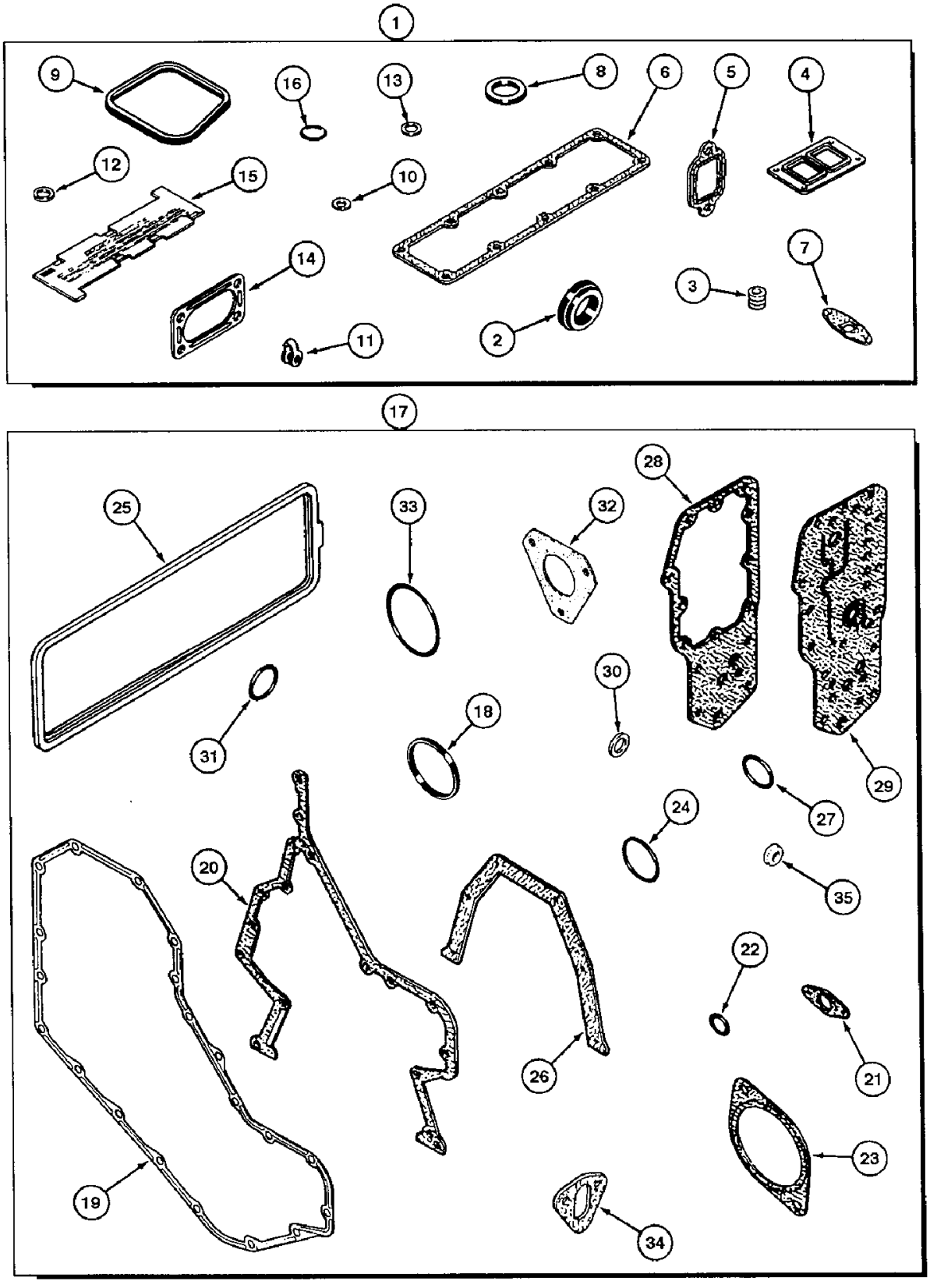


B920215S

PISTONS, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
11		A77467		6	BEARING SET KIT - bearing, upper and lower set, 0.50 mm undersize, connecting rods
11		A77468		6	BEARING SET KIT - bearing, upper and lower set, 0.75 mm undersize, connecting rods
11		A77469		6	BEARING SET KIT - bearing, upper and lower set, 1.00 mm undersize, connecting rods

GASKET KITS, 4-390 ENGINE, 4T-390 ENGINE, VALVE GRIND



B9408128

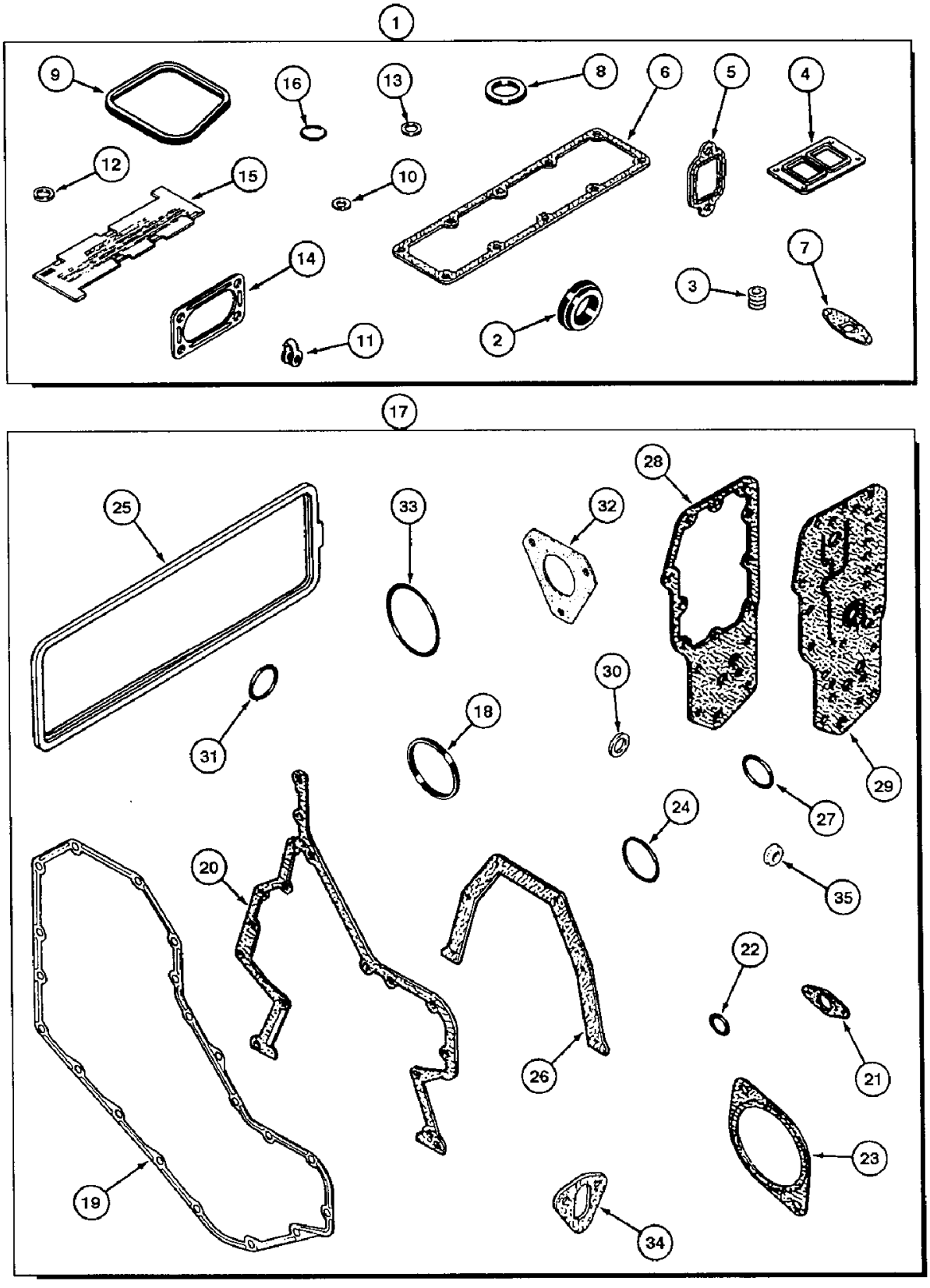
GASKET KITS, 4-390 ENGINE, 4T-390 ENGINE, VALVE GRIND

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1	1	A77792		1	GASKET KIT KIT - gasket, valve grind, engine
2		J923331		1	GASKET - thermostat housing, replaces J920020 gasket
3		J901097		8	SEAL - valve, intake and exhaust valve guides
4		J901356		1	GASKET -
5		J905443		4	MANIFOLD GASKET - exhaust manifold
6		J914028		1	GASKET - intake manifold
7		J914388		1	GASKET - turbo oil drain tube
8		J902363		1	SEAL 30 mm ID x 48 mm OD - oil fill cap
9		J902666		4	GASKET SEAL - rocker arm cover
10		J900808		4	SEAL - injector nozzle, 9 mm injector tip, not used in this application
11		J903380		4	SEAL - connector, fuel return manifold tube
12		J906659		4	SEAL - injector nozzle, 7 mm injector tip, replaces J920174 seal
13		J909356		4	SEAL O-RING - sealing, body to nut, injector body, 7 mm
14		J914856		1	GASKET - air crossover connection
15		J823921		1	GAUGE - cylinder head, bolt length
16		J910824		4	O-RING - cover bolt
17	2	A77671		1	GASKET KIT KIT - gasket, engine block, cylinder
18		J903475		1	SEALING RING - front access cover, cylinder block
19		J914385		1	GASKET - front cover, to housing, cylinder block
20		J916131		1	GASKET - gear housing, timing, cylinder block
21		J905595		1	GASKET - timing pin housing, cylinder block
22		J913994		1	O-RING - sealing, timing pin, cylinder block

(1) When just the valve grind gasket kit is used, also order the required cylinder head gasket, item 2, Figure 2-16.

(2) For complete engine overhaul, order 1 cylinder block kit, 1 valve grind kit, 1 oil pan kit, Figure 2-16, front and rear

GASKET KITS, 4-390 ENGINE, 4T-390 ENGINE, VALVE GRIND

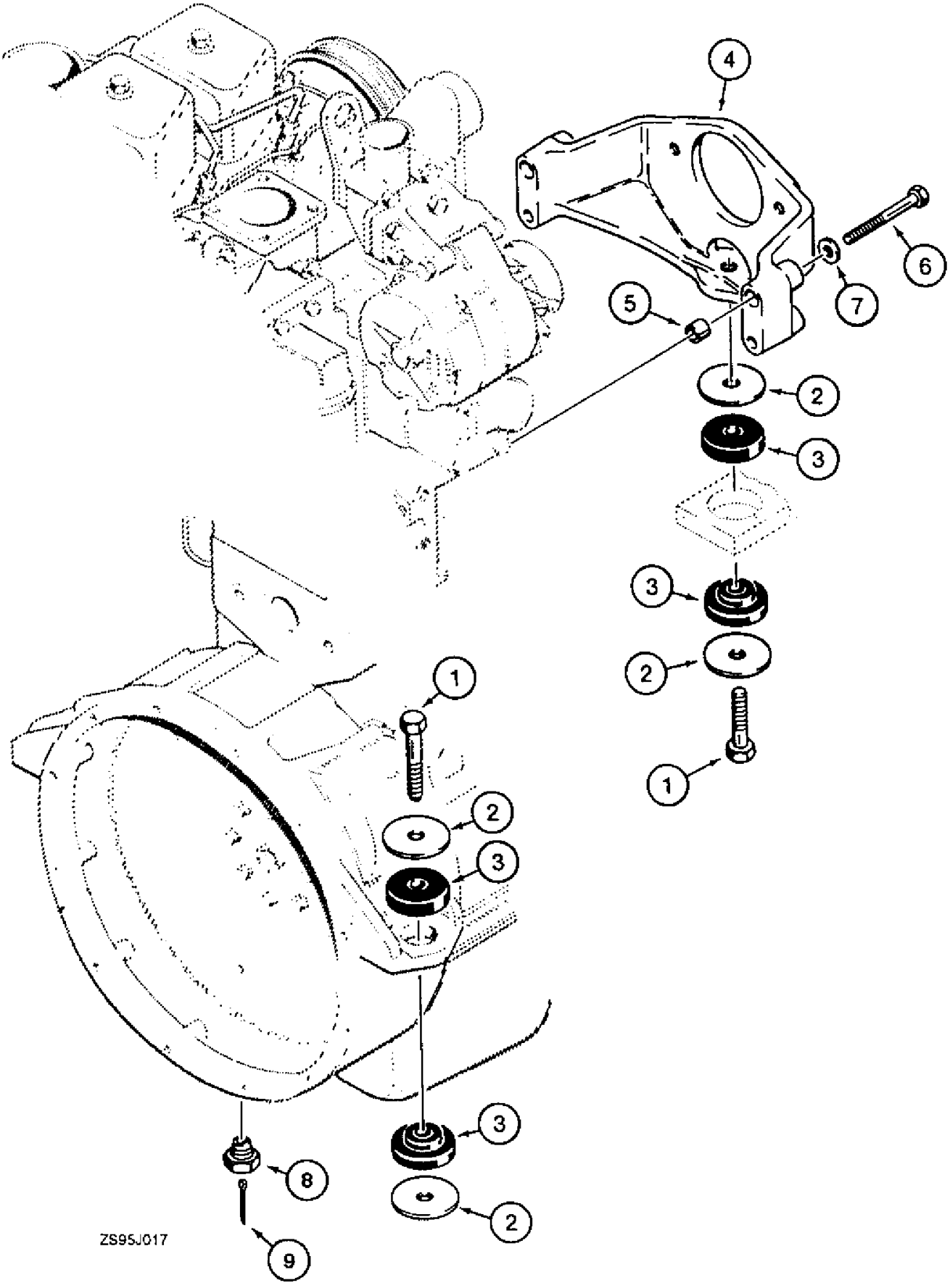


B9408128

GASKET KITS, 4-390 ENGINE, 4T-390 ENGINE, VALVE GRIND

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
23		J919601		1	GASKET - access cover plate, accessory drive, cylinder block
24		238-5341		1	O-RING -341, 70 Duro, 3.475" ID x .210" Thk Water pump to block, cylinder -341, 70 Duro, 3.475" ID x .210" Thk
25		J928831		1	GASKET - tappet cover, replaces J922078 gasket, cylinder block
26		J928493		1	GASKET - rear cover retainer, crankshaft, replaces J914386 gasket, cylinder block
27		J906697		1	SEAL O-RING - sealing, 50 mm ID, water inlet connection, cylinder block
28		J926760		1	GASKET - oil cooler core, replaces J918256 gasket, cylinder block
29		J918257		1	GASKET - filter head, oil, cylinder block
30		J902425		1	SEALING WASHER - sealing, plug, oil pan, cylinder block
31		J906696		1	SEAL O-RING - sealing, 38 mm ID, engine oil fill tube, cylinder block
32		J914389		1	GASKET - pump mounting, fuel, cylinder block
33		J912473		1	SEAL O-RING - flywheel housing to block, cylinder
34		J923054		1	GASKET - mounting, fuel transfer pump, replaces J914304 gasket, cylinder block
35		J900267		4	SEAL - cover bolt, cylinder block

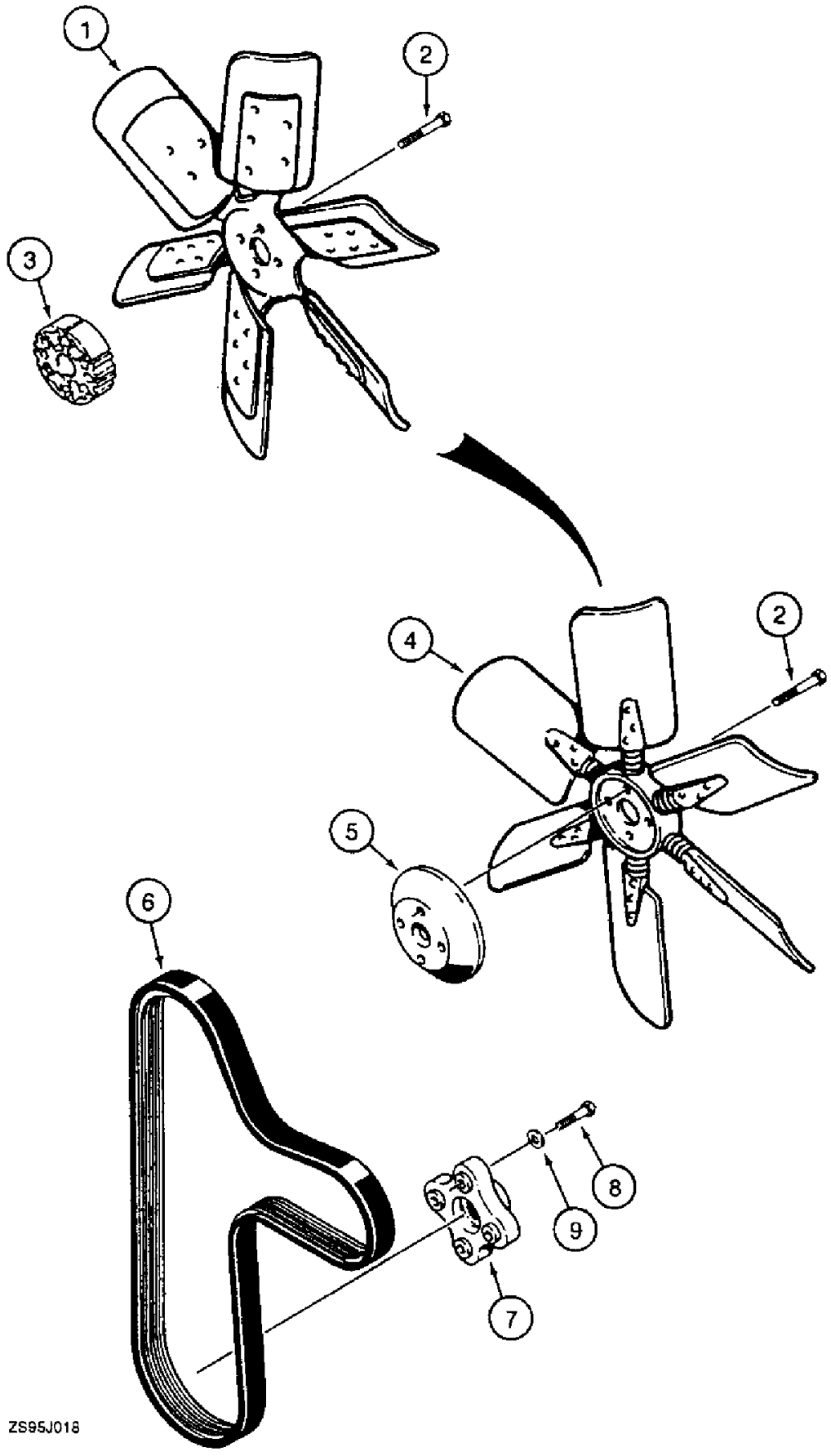
ENGINE MOUNTING



ENGINE MOUNTING

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		113-2632		3	LOCK BOLT Locking, 5/8"-11 x 3 1/2", G5 BOLT, Locking, 5/8-11 x 3 1/2", G5
2		R49597		6	WASHER - flat, special, 5/8 inch
3		R49482		6	RUBBER MOUNTING INSULATOR - rubber
4		A170580		1	SUPPORT - engine
5		A170309		2	RING SPACER - engine mount
6		A171690		4	BOLT (SPREADER) BOLT - hex, special, 12 mm - 1.75 x 85 mm, class 10.9
7		496-21053		4	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened
8		L113178		1	PLUG BUSHING - pipe
9		32-1416		1	COTTER PIN 7/32" x 1" PIN - cotter, 1/16 x 1 inch

RADIATOR FAN, BELT, AND MOUNTING

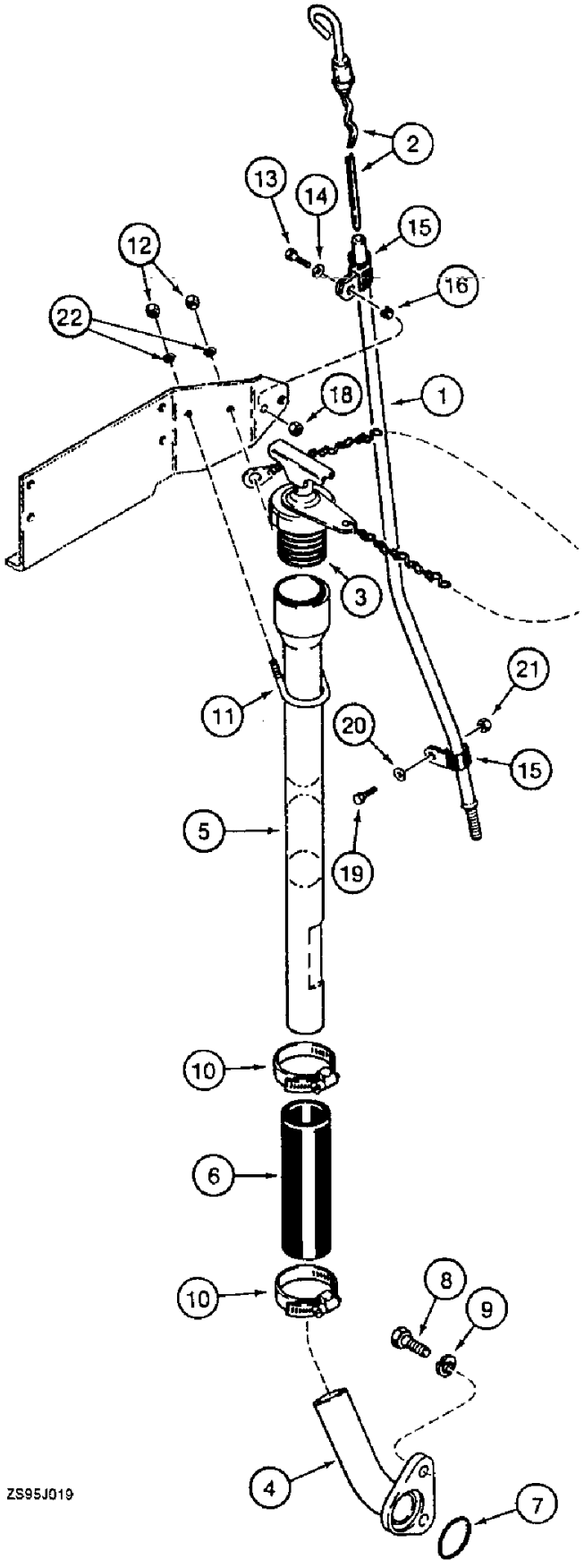


RADIATOR FAN, BELT, AND MOUNTING

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		1998736C1		1	FAN - pusher
2		854-10050		4	BOLT Hex Flg, M10 x 50, 10.9 - hex, 10 - 1.5 x 55 mm class 10.9
3		A184544		1	SPACER - 1-1/4 inch wide
4		A184472		1	FAN - reversible
5		A184539		1	SPACER - reversible fan
6		J911563		1	V-BELT 3.56 mm W x 1625.60 mm L, 8 Ribs 3.56 mm W x 1536.70 mm L, 8 Ribs, Fan
7		D140524		1	SPLINED COUPLING COUPLING - flexible, crankshaft
8		413-724		4	BOLT Hex, 7/16"-14 x 1 1/2", G5 - hex, 7/16 NC x 1-1/2 inch
9		A30013		4	WASHER - special, hardened

NOTE: For fan pulley and belt tensioner see figure 2-02.

ENGINE DIPSTICK AND FILL TUBE



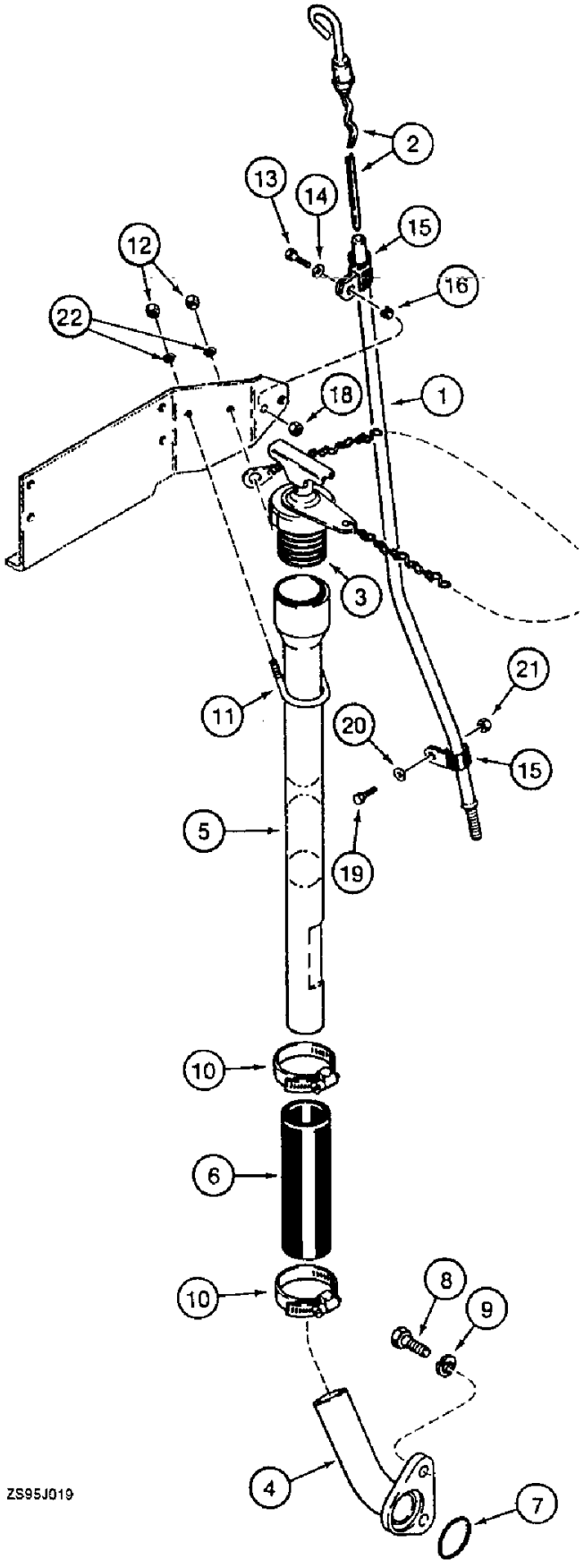
ENGINE DIPSTICK AND FILL TUBE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R47970		1	TUBE 9.52 mm OD x 760, 173 mm L - dipstick
2		R48402		1	DIPSTICK - engine oil
3		L115504		1	CAP - filler tube, includes chain
4		R53750		1	TUBE 24 mm L - engine oil fill, lower
5		R53769		1	TUBE 38.1 mm OD x 540, 40 mm L - engine oil fill, upper
6	1	R53715		1	HOSE 38.10 mm ID x 170.00 mm, SAE 20R1 Class B Oil Fill, Cut from 183616C1 Bulk Hose, See Below 38.10 mm ID x 170.00 mm, SAE 20R1 Class B
7		J906696		1	SEAL O-RING - sealing
8		614-12025		2	BOLT Hex, M12 x 25, 8.8 - hex, full threads, 12 - 1.75 x 25 mm
9		892-11012		2	LOCK WASHER M12 WASHER, LOCK, M12
10		214-3132		2	HOSE CLAMP 1.25/2.125 HD Worm CLAMP - adj, 1-1/4 - 2-1/8 inch dia, engine oil fill
11		L73167		1	U-BOLT - to coolant recovery bottle bracket
12		231-1444		2	NUT 1/4"-20, GB NUT, LOCK, 1/4"-20, GB
13		413-524		1	BOLT Hex, 5/16"-18 x 1 1/2", G5 - hex, 5/16 NC x 1-1/2 inch
14		495-11034		1	WASHER 5/16", SAE 5/16" SAE (flat, 11/32 x 11/16 x 1/16")
15		515-2295		2	CLAMP 3/8", Insul, 5/16" Bolt P-type 3/8", Insul, 5/16" Bolt
16		R39516		1	GROMMET - rubber, used with upper dipstick tube clamp only
18		231-1445		1	NUT 5/16"-18, GB NUT - hex, self-locking, 5/16 inch NC
19		413-412		1	BOLT Hex, 1/4"-20 x 3/4", G5, Full Thd - hex, 1/4 NC x 3/4 inch
20		495-21031		1	WASHER 1/4" - flat, 5/16 x 3/4 x 1/16 inch

(1) For mounting bracket for fill tube and dipstick tube see side shield support, item 8 on figure 9-20.

NOTE: For mounting bracket for fill tube and dipstick tube see side shield support, item 8 on figure 9-20.

ENGINE DIPSTICK AND FILL TUBE



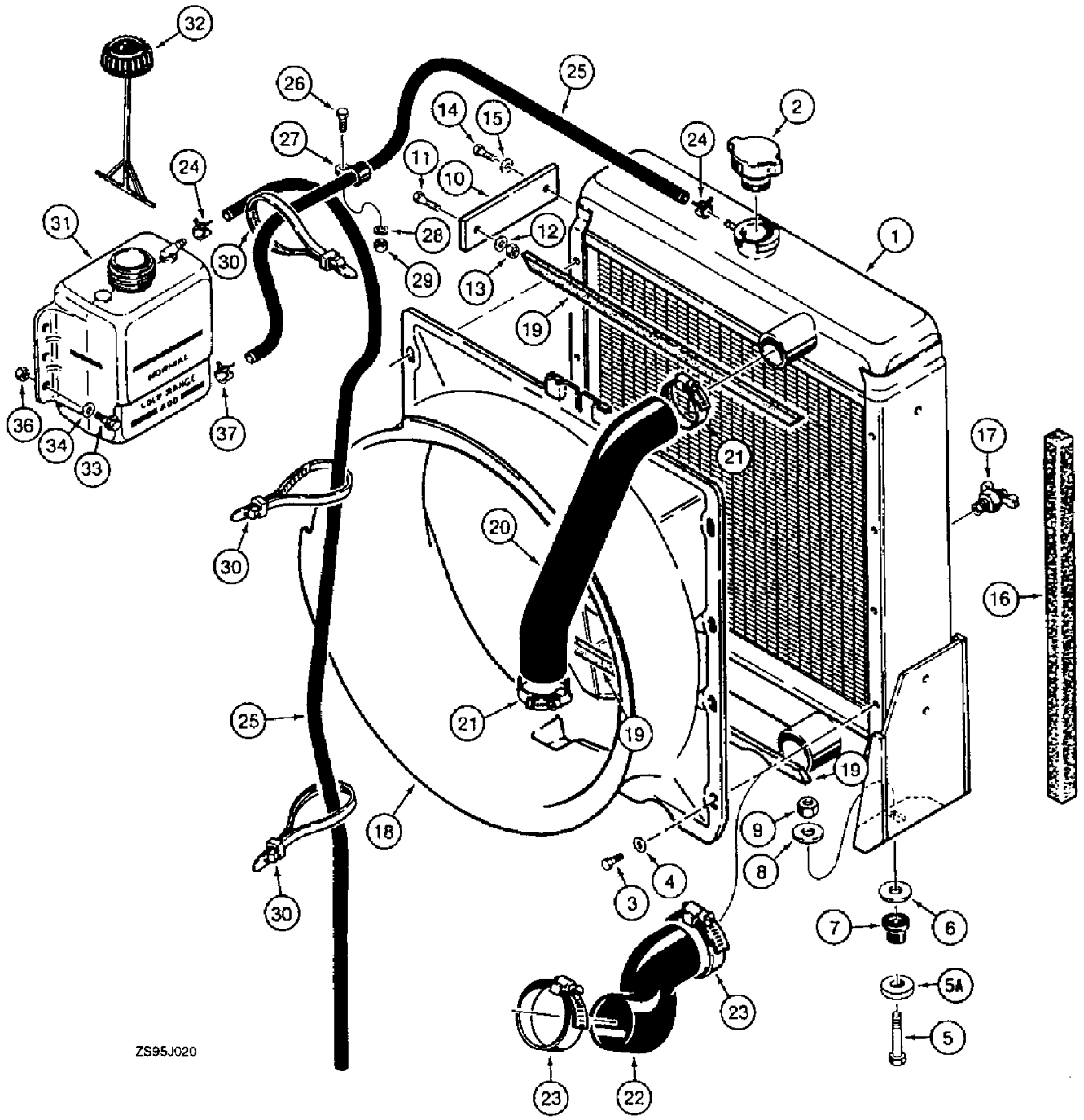
ENGINE DIPSTICK AND FILL TUBE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
21		231-1444		1	NUT 1/4"-20, GB NUT, LOCK, 1/4"-20, GB
22		495-11028		2	WASHER 1/4", SAE (flat, 9/32 x 5/8 x 1/16") 1/4", SAE
	1	183616C1		UAR	HOSE 38.1 mm ID x 1168.40 mm, SAE 20R1 - bulk, 1-1/2 (38) ID x 1-11/16 (43) OD x 46 inch (1168 mm) long

(1) For mounting bracket for fill tube and dipstick tube see side shield support, item 8 on figure 9-20.

NOTE: For mounting bracket for fill tube and dipstick tube see side shield support, item 8 on figure 9-20.

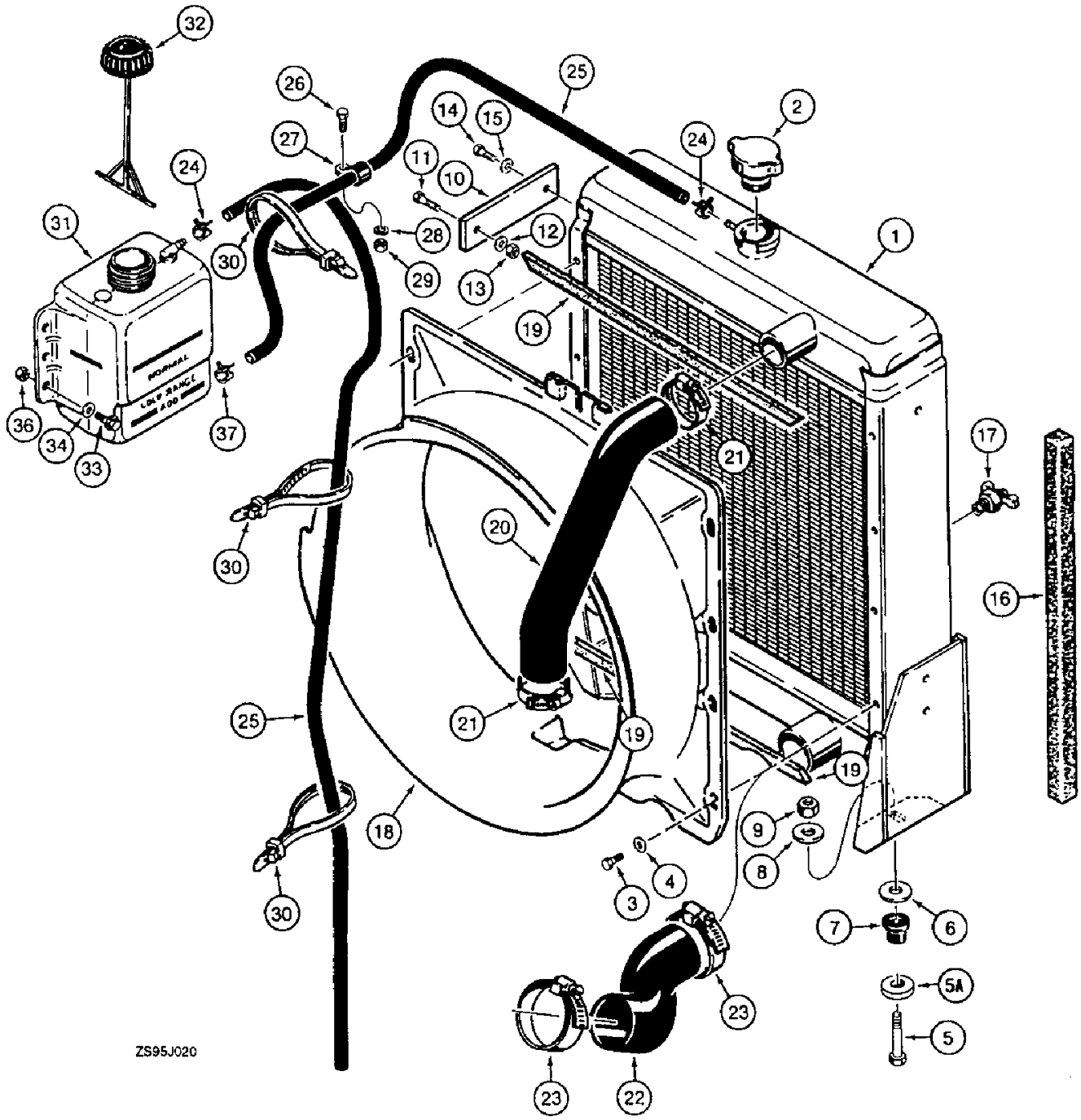
RADIATOR, HOSES, AND COOLANT BOTTLE



RADIATOR, HOSES, AND COOLANT BOTTLE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		A172867		1	RADIATOR - standard, if used
1		A172869		1	RADIATOR - anti-sandblast, if used
2		A170241		1	RADIATOR CAP CAP, RADIATOR, Filler, 15 psi
3		614-8016		8	BOLT Hex, M8 x 16, 8.8 - hex, full threads, 8 - 1.25 x 16 mm
4		H272880		8	WASHER - flat, special
5		413-836		2	BOLT Hex, 1/2"-13 x 2 1/4", G5 - hex, 1/2 NC x 2-1/4 inch
5A		D25022		2	WASHER - flat, special, radiator mounting
6		R40262		2	WASHER - flat, special
7		R29799		2	SHOCK ABSORBER INSULATOR - rubber
8		496-21053		2	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened
9		231-4118		2	LOCK NUT 1/2"-13, GB NUT - hex, self-locking, 1/2 inch NC
10		A170665		2	STABILIZER STRAP - radiator mounting
11		413-620		2	BOLT Hex, 3/8"-16 x 1 1/4", G5, Full Thd - hex, 3/8 NC x 1-1/4 inch
12		39519		2	WASHER - flat, special
13		230-4216		2	LOCK NUT 3/8"-16, GA NUT - hex, self-locking, 3/8 inch NC
14		613-8020		2	BOLT Hex, M8 x 20, 8.8, Full Thd - hex, full threads, 8 - 1.25 x 20 mm, Use with Loctite 242
15		495-21038		2	WASHER 5/16" (flat, 3/8 x 7/8 x 3/32") 5/16"
16		R53691		2	FILLING STRIP PAD - 23-13/16 inch (580 mm) long, cut from A139751 bulk pad, see below
17		217-92		1	COCK VALVE - 1/4 inch PT
18		A173459		1	SHROUD - fan
19		178769A1		2	SEAL - fan shroud, adhesive-backed

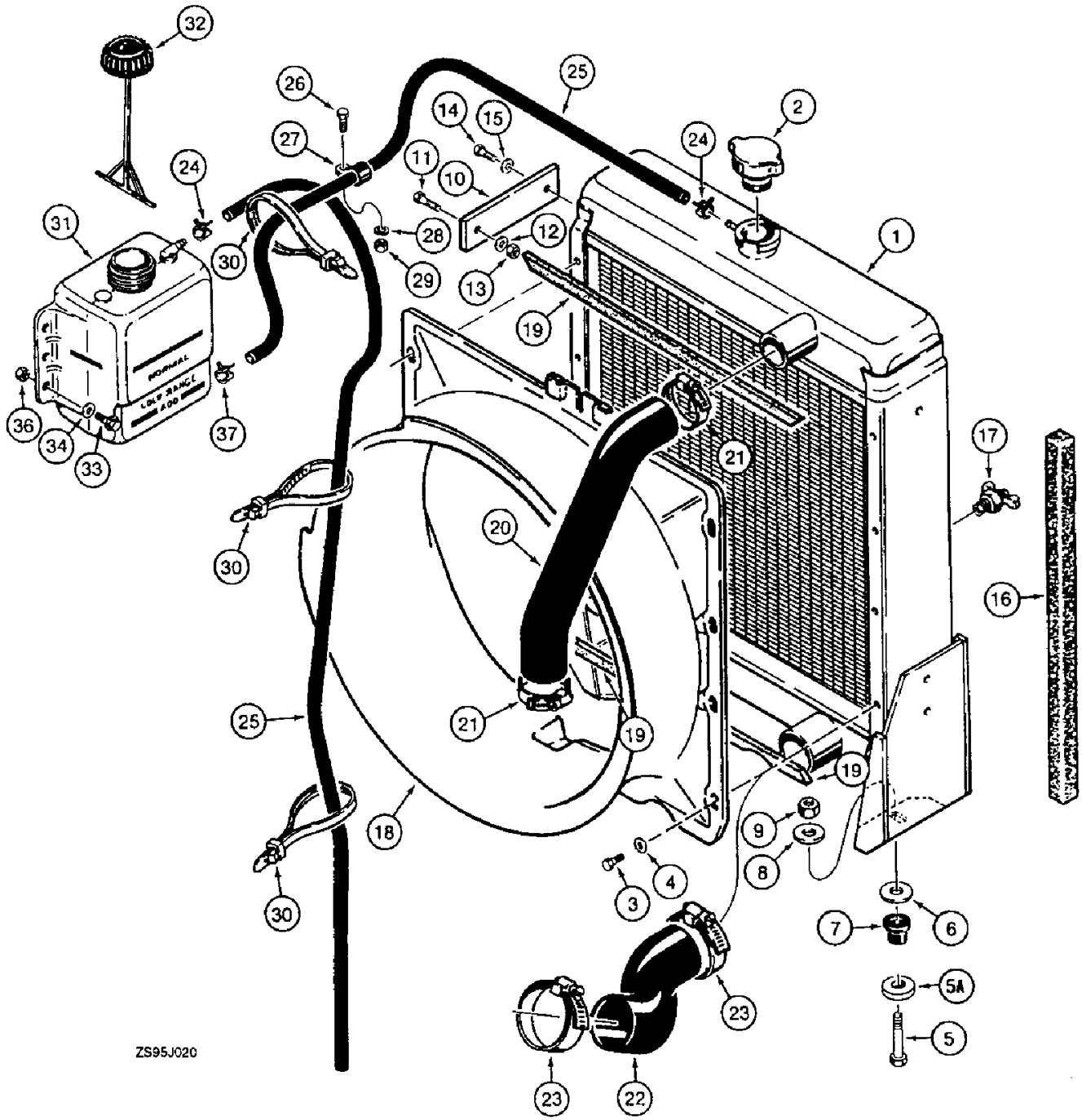
RADIATOR, HOSES, AND COOLANT BOTTLE



RADIATOR, HOSES, AND COOLANT BOTTLE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
20		A170239		1	RADIATOR HOSE 45.00 mm ID x 265.00 mm, SAE 20R4 CLASS C PER SAE J20 OR SAE 20R4 CLASS D1 45.00 mm ID x 265.00 mm , SAE 20R4, Upper
21		214-3132		2	HOSE CLAMP 1.25/2.125 HD Worm CLAMP - adj, 1-1/4 - 2-1/8 inch dia, upper radiator hose
22		A170633		1	RADIATOR HOSE 58.00 mm ID x 220.00 mm, SAE 20R4 PER SAE J20 OR SAE 20R4 CLASS D1 58.00 mm ID x 220.00 mm, SAE 20R4 per SAE J20, Lower
23		214-3148		2	HOSE CLAMP 2.25/3.125 HD Worm CLAMP - adj, 2-1/4 - 3-1/8 inch dia, lower radiator hose
24		A171099		2	HOSE CLAMP CLAMP - coolant bottle hoses
25		A171872		2	HOSE 8.30 mm ID x 1000.00 mm, SAE J30, SAE 20R4 PER SAE j20e 7.50 mm ID, 8.30 mm ID x 1000.00 mm, SAE J30 - Cut from L126767 hose, Radiator to Coolant Bottle and Bottle Overflow
26		413-616		1	BOLT Hex, 3/8"-16 x 1", G5, Full Thd - hex, 3/8 NC x 1 inch
27		515-23127		1	CLAMP 1/2", Insul, 3/8" Bolt P-type, at hood and side shield support 1/2", Insul, 3/8" Bolt
28		492-11038		1	LOCK WASHER 3/8"
29		425-106		1	NUT 3/8"-16, G5
30		L18337		UAR	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon
31		L127093		1	COOLANT EXPANSION RESERVOIR RESERVOIR - coolant
32		1547924C1		1	CAP - coolant recovery bottle, with tether
33		121-107		4	BOLT Hex Flg, 5/16"-18 x 1", Serr
34		495-11034		4	WASHER 5/16", SAE 5/16" SAE (flat, 11/32 x 11/16 x 1/16")
36		231-1445		4	NUT 5/16"-18, GB NUT - hex, self-locking, 5/16 inch NC
37		214-1404		1	HOSE CLAMP #4, 0.25/0.62 Type M Worm CLAMP - adj, 1/4 - 5/8 inch dia, Type F, coolant bottle inlet

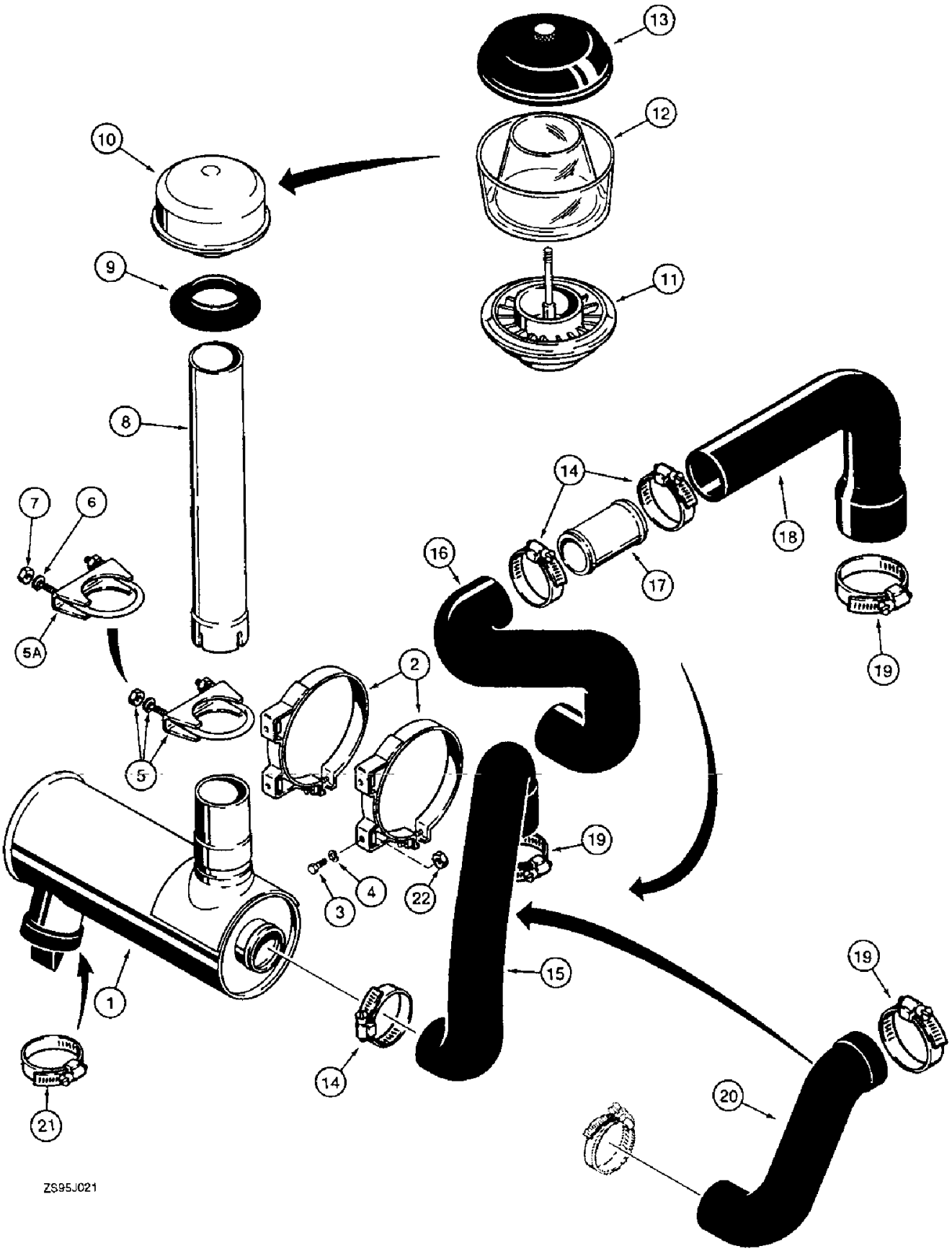
RADIATOR, HOSES, AND COOLANT BOTTLE



RADIATOR, HOSES, AND COOLANT BOTTLE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		A139751		UAR	FILLING STRIP FOAM - bulk, 75 inch (1905 mm) long
		L126767		UAR	HOSE 7.9 mm ID x 2336.00 mm, SAE 30R6 or SAE 20R4 Class D1

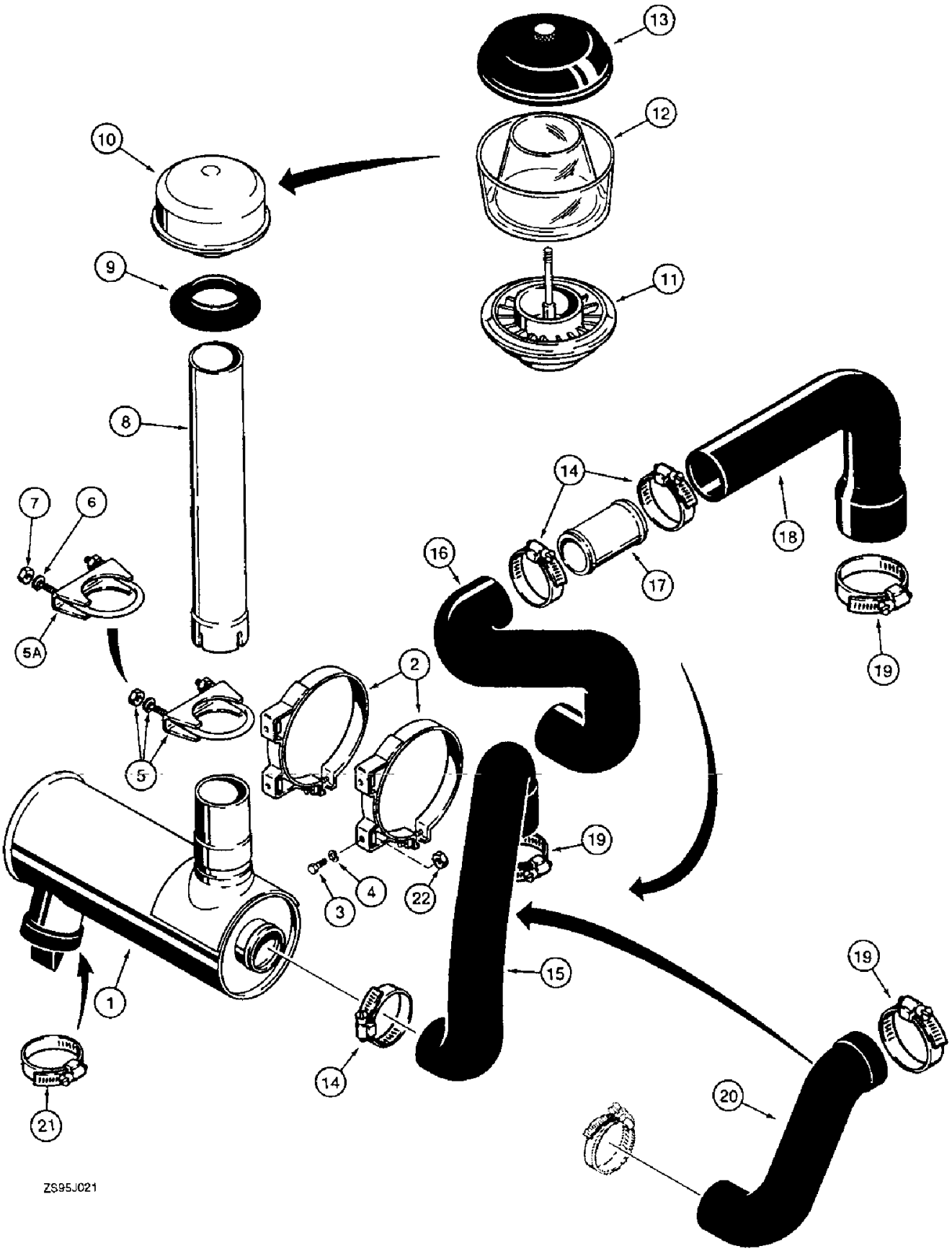
AIR CLEANER MOUNTING AND INTAKE PARTS



AIR CLEANER MOUNTING AND INTAKE PARTS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		A170974		1	AIR CLEANER CLEANER ASSEMBLY - air, engine
2		L113910		2	CLAMP - air cleaner mounting, without weld nuts, replaces clamp with weld nuts
3		413-616		4	BOLT Hex, 3/8"-16 x 1", G5, Full Thd - hex, 3/8 NC x 1 inch
4		492-11038		4	LOCK WASHER 3/8"
5		L14222		1	CLAMP ASSEMBLY - pipe, includes lock washers and nuts
5A		L73711		1	CLAMP - pipe, no longer used, service with item 5, L14222 clamp assembly
6		492-11038		2	LOCK WASHER 3/8" no longer used, service with item 5, L14222 clamp assembly 3/8"
7		425-106		2	NUT 3/8"-16, G5 No longer used, Service with item 5, L14222 clamp assembly 3/8"-16, G5
8		A170512		1	TUBE PIPE - air cleaner inlet
9		D93451		1	GROMMET - hood, air cleaner inlet pipe
10		A61277		1	CAP - air cleaner, if used
		A24391		1	AIR CLEANER PRECLEANER ASSEMBLY - air, if used
11		NSS		1	NOT SERVICED SEPARATELY BODY - precleaner
12		365413R1		1	BOWL - precleaner
13		365412R91		1	COVER - precleaner (Replaces 365412R1)
14		214-3256		1-2	HOSE CLAMP 2.75/3.625 HD Worm, W/liner CLAMP - adj, 2-3/4 - 3-5/8 inch dia, air cleaner hose
15		R49013		1	INTAKE AIR HOSE 63.50 mm ID, 76.20 mm ID x 556.00 mm, SAE J200 - Air cleaner to intake manifold, Used on models without a turbocharger with a standard muffler, if used 63.50 mm ID, 76.20 mm ID x 556.00 mm, SAE J200

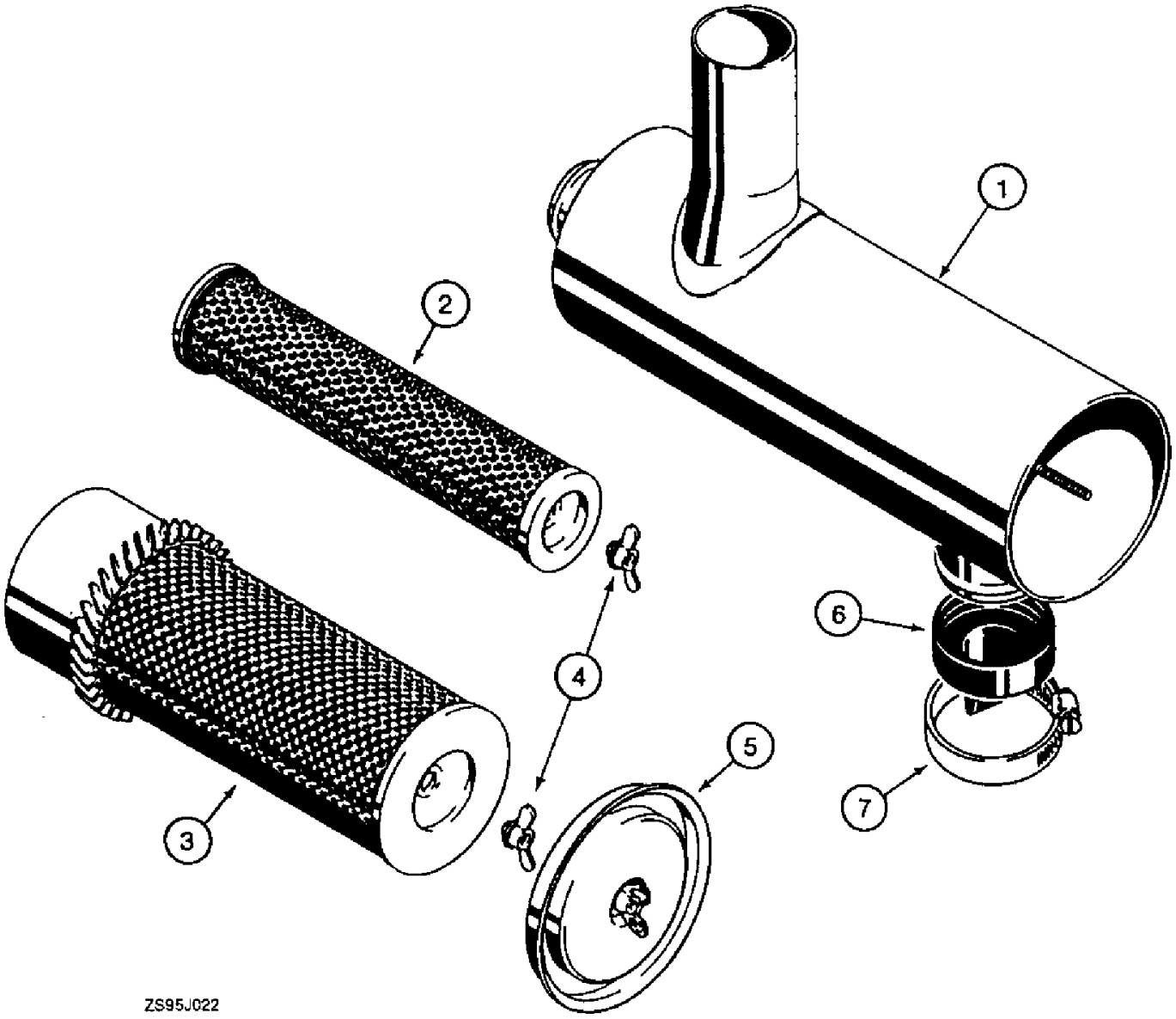
AIR CLEANER MOUNTING AND INTAKE PARTS



AIR CLEANER MOUNTING AND INTAKE PARTS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
16		R56616		1	INTAKE AIR HOSE 63.50 mm ID x 290.00 mm, SAE J200 - At air cleaner, Used on models without a turbocharger with a spark arresting muffler, if used 63.50 mm ID x 290.00 mm, SAE J200
17		R56615		1	TUBE 63.5 mm OD x 115 mm L - if used
18		R56614		1	INTAKE AIR HOSE 63.50 mm ID, 76.20 mm ID x 401.00 mm, SAE J200 AIR INTAKE HOSE - At intake manifoldd, Used on models without a turbocharger with a spark arresting muffler, if used 63.50 mm ID, 76.20 mm ID x 401.00 mm, SAE J200
19		214-3164		1	HOSE CLAMP 3.25/4.125 HD Worm CLAMP - adj, 3-1/4 - 4-1/8 inch dia, at intake manifold
20		R49014		1	PIPE HOSE - air cleaner to turbocharger, used on models with a turbocharger, if used
21		214-1448		1	HOSE CLAMP #48, 2.56/3.50 Type F Worm CLAMP - adj, 2-9/16 - 3-1/2 inch dia, air cleaner dust cap
22		425-106		4	NUT 3/8"-16, G5 If used 3/8"-16, G5

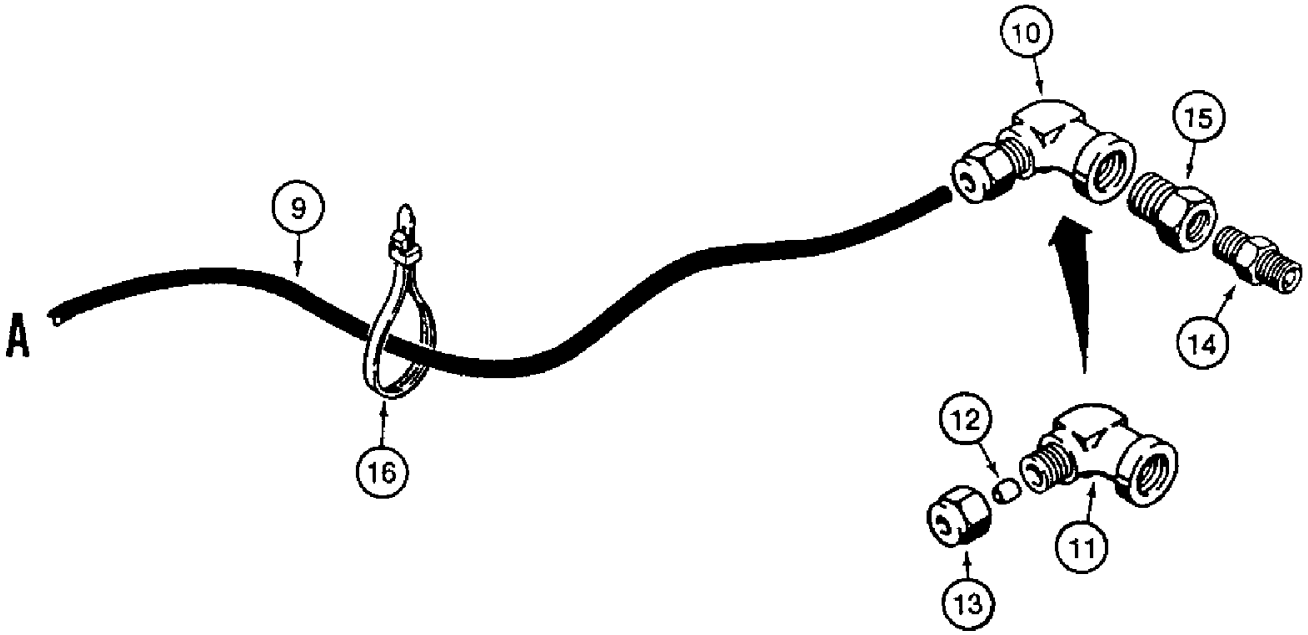
AIR CLEANER

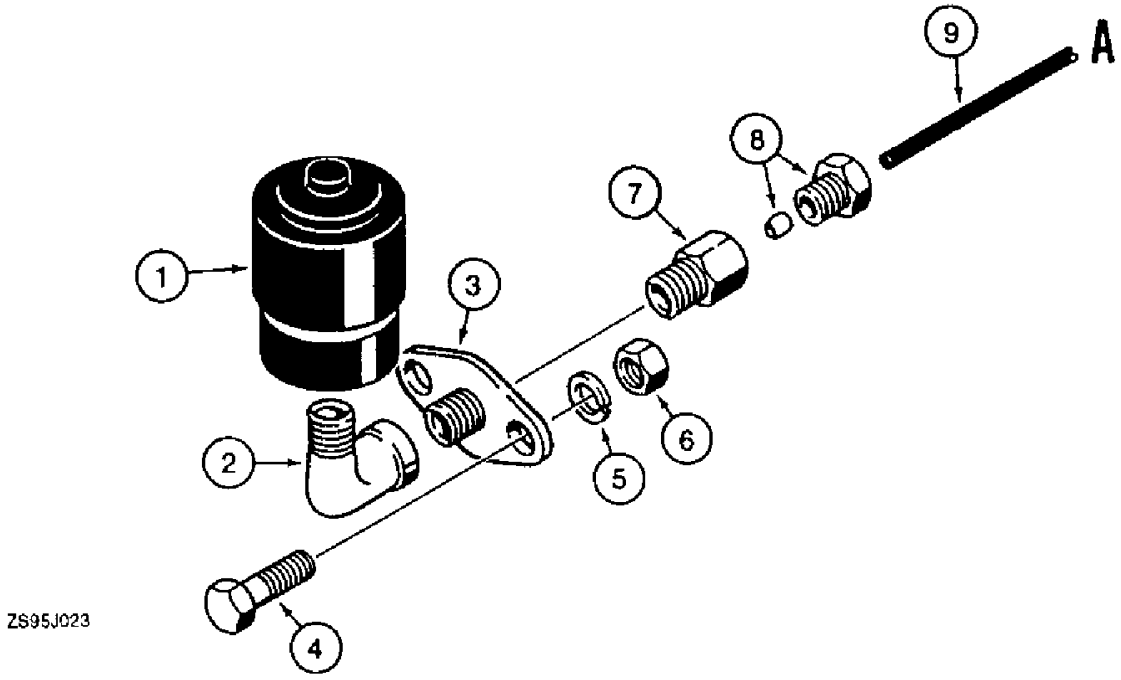


AIR CLEANER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		A170974		1	AIR CLEANER CLEANER ASSEMBLY - air, engine
1		NSS		1	NOT SERVICED SEPARATELY BODY - air cleaner
2		A173291		1	AIR FILTER ELEMENT - secondary
3		A173290		1	AIR FILTER ELEMENT - primary
4		D78354		2	WING NUT NUT - wing
5		N6779		1	COVER - end
6		S113982		1	CAP VALVE - dust, rubber, 3 inch (76 mm)
7		214-1448		1	HOSE CLAMP #48, 2.56/3.50 Type F Worm CLAMP - adj, 2-9/16 - 3-1/2 inch dia, not part of air cleaner assembly, order separately

AIR RESTRICTION INDICATOR, MODELS WITHOUT A TURBOCHARGER





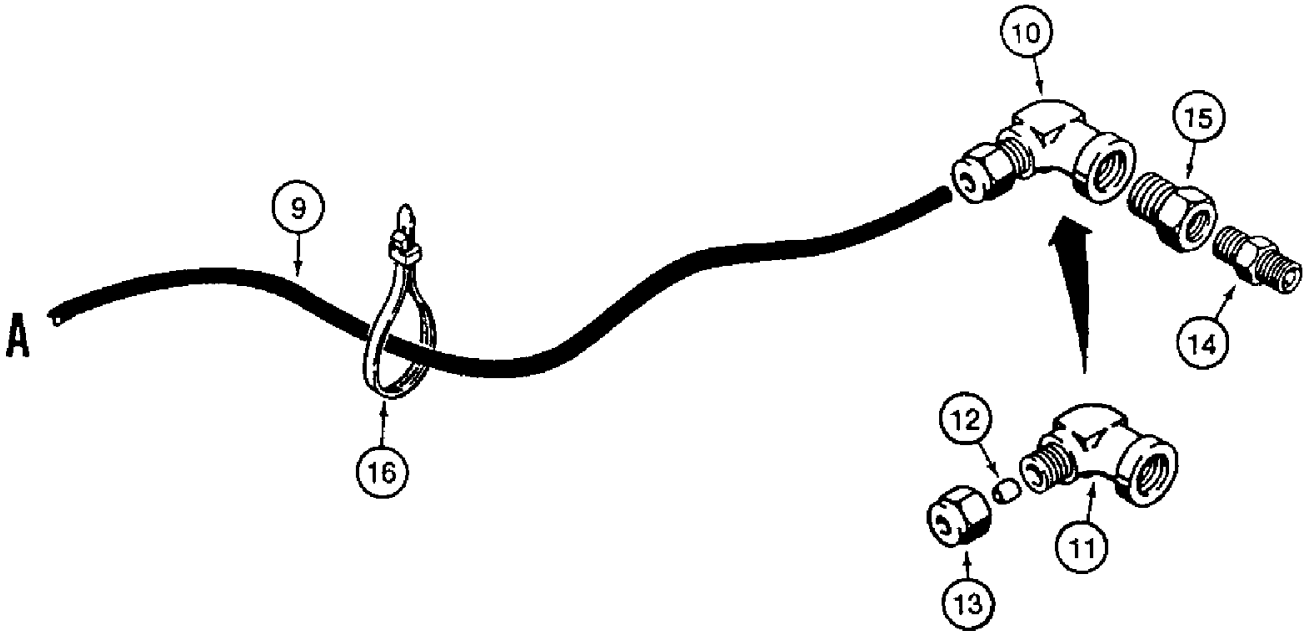
AIR RESTRICTION INDICATOR, MODELS WITHOUT A TURBOCHARGER

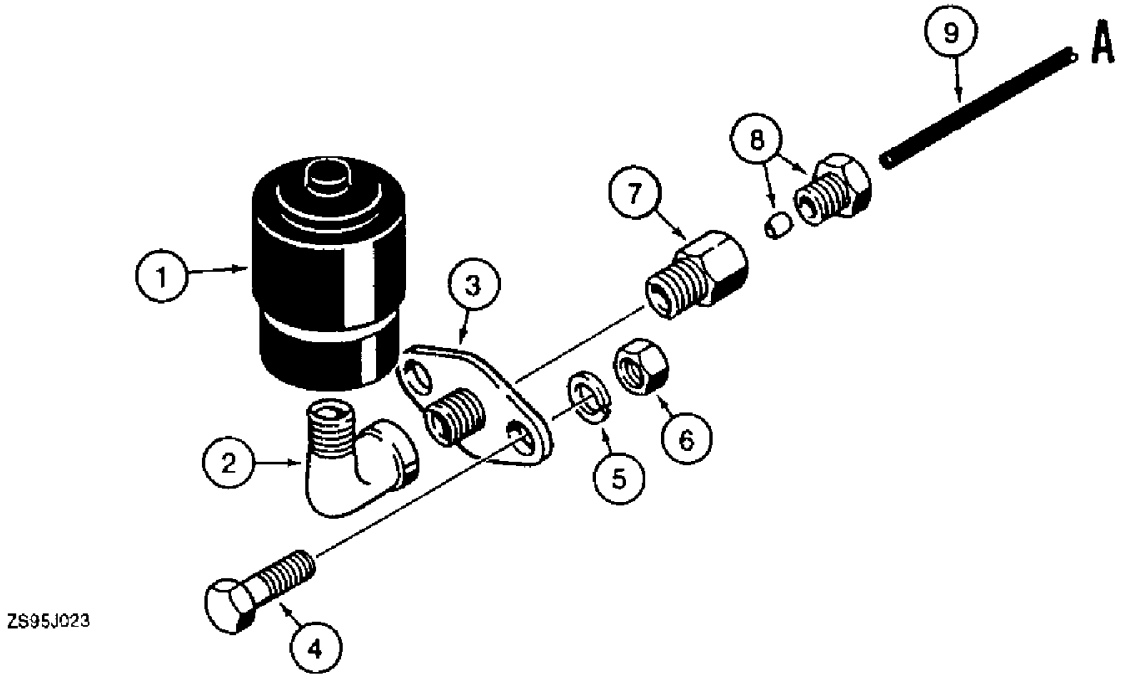
REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		A59569		1	INDICATOR - restriction
2		217-20		1	ELBOW 90º, 1/8"-28 NPTF, Fem x 1/8"-27 NPTF Male Street 90º, 1/8"-28 NPTF, Fem x 1/8"-27 NPTF Male
3		H357707		1	FLANGE BRACKET - restriction indicator mounting
4		413-412		2	BOLT Hex, 1/4"-20 x 3/4", G5, Full Thd - hex, 1/4 NC x 3/4 inch
5		492-11025		2	LOCK WASHER 1/4" WASHER, LOCK, 1/4"
6		425-104		2	NUT 1/4"-20, G5 - hex, 1/4 inch NC
		222-400		1	HYD CONNECTOR 1/8" NPT x 5/16"-24 ADAPTER - compression, 1/8 tube OD x 1/8 inch PT
7		NSS		1	NOT SERVICED SEPARATELY BODY - adapter
8		222-500		1	TUBE NUT 5/16"-24 NUT - hex, 1/8 tube OD x 5/16-24 inch, includes sleeve
9	1	R27253		1	PLASTIC-RUBBER TUBE 0.125" OD x 46" L TUBE - nylon, 46 inch (1168 mm) long, cut from S118583X bulk tube, see below
10		222-5390		1	ELBOW 90º, 3/8"-24 x 1/8" NPT - 90 deg, compression, 1/8 tube OD x 1/8 inch fem PT
11		NSS		1	NOT SERVICED SEPARATELY BODY - elbow
12		222-4976		1	SLEEVE 1/8" Tube - 1/8 inch tube OD
13		222-4988		1	TUBE NUT 1/8" Tube NUT - hex, 1/8 tube OD x 3/8-24 inch
14		D36264		1	FITTING ADAPTER - air restriction indicator, filter-type
15		221-87		1	REDUCER Hex, 1/2" x 1/8" NPT - pipe, 1/2 male x 1/8 inch female
16		L18337		UAR	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon

(1) For restriction indicator parts used on models with a turbocharger see figure 2-54.

NOTE: For restriction indicator parts used on models with a turbocharger see figure 2-54.

AIR RESTRICTION INDICATOR, MODELS WITHOUT A TURBOCHARGER



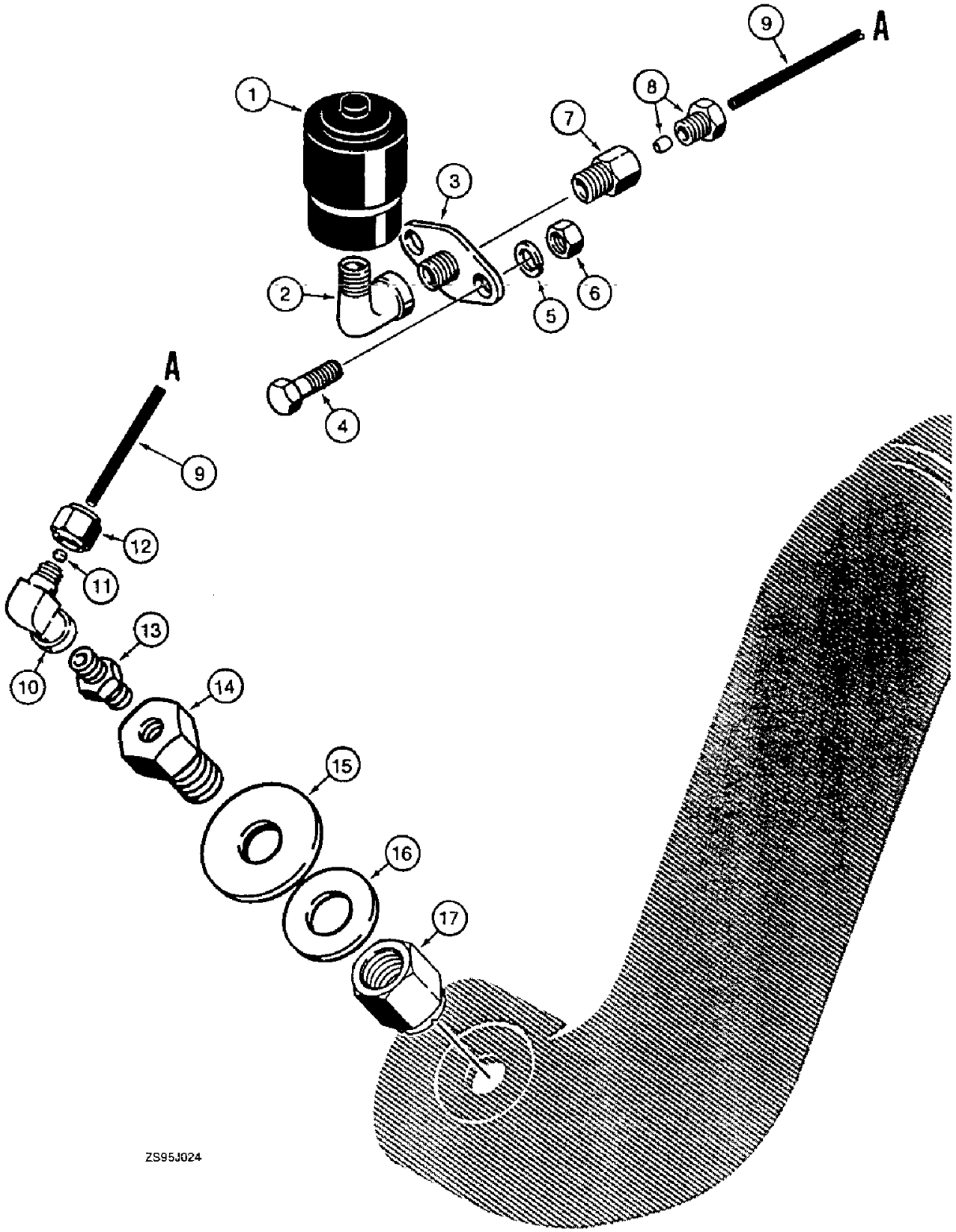


AIR RESTRICTION INDICATOR, MODELS WITHOUT A TURBOCHARGER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		S118583X		UAR	PLASTIC-RUBBER TUBE TUBE - bulk, nylon, 1/8 (3 mm) ID x 300 inch (7620 mm) long

NOTE: For restriction indicator parts used on models with a turbocharger see figure 2-54.

AIR RESTRICTION INDICATOR, MODELS WITH A TURBOCHARGER



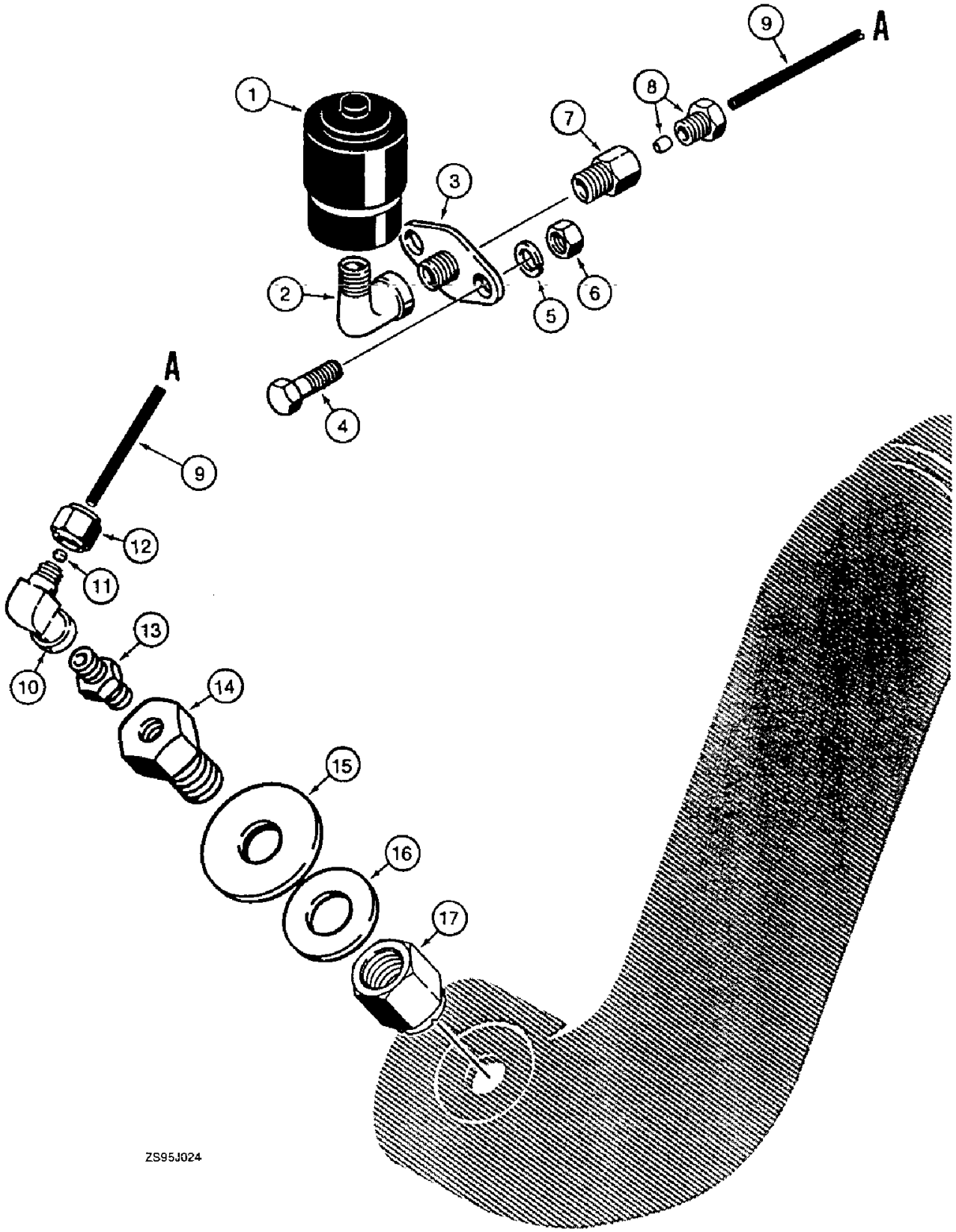
AIR RESTRICTION INDICATOR, MODELS WITH A TURBOCHARGER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		A59569		1	INDICATOR - restriction
2		217-20		1	ELBOW 90º, 1/8"-28 NPTF, Fem x 1/8"-27 NPTF Male Street 90º, 1/8"-28 NPTF, Fem x 1/8"-27 NPTF Male
3		H357707		1	FLANGE BRACKET - restriction indicator mounting
4		413-412		2	BOLT Hex, 1/4"-20 x 3/4", G5, Full Thd - hex, 1/4 NC x 3/4 inch
5		492-11025		2	LOCK WASHER 1/4" WASHER, LOCK, 1/4"
6		425-104		2	NUT 1/4"-20, G5 - hex, 1/4 inch NC
		222-400		1	HYD CONNECTOR 1/8" NPT x 5/16"-24 ADAPTER - compression, 1/8 tube OD x 1/8 inch PT
7		NSS		1	NOT SERVICED SEPARATELY BODY - adapter
8		222-500		1	TUBE NUT 5/16"-24 NUT - hex, 1/8 tube OD x 5/16-24 inch, includes sleeve
9	1	R52565		1	TUBE 0.125" OD x 29.5" L - nylon, 29-1/2 inch (750 mm) long, cut from L60539X bulk tube, see below
		222-5390		1	ELBOW 90º, 3/8"-24 x 1/8" NPT - 90 deg, compression, 1/8 tube OD x 1/8 inch female PT
10		NSS		1	NOT SERVICED SEPARATELY BODY - elbow
11		222-4976		1	SLEEVE 1/8" Tube - 1/8 inch tube OD
12		222-4988		1	TUBE NUT 1/8" Tube NUT - hex, 1/8 tube OD x 3/8-24 inch
13		D36264		1	FITTING ADAPTER - air restriction indicator, filter-type
14		A170609		1	FITTING ADAPTER - special, 1/8 inch PT x 3/4 inch NC
15		S107793		1	SEALING WASHER WASHER - with rubber seal, 3/4 inch, special
16		495-11081		1	WASHER 3/4", SAE
17		131-83		1	NUT 3/4"-10 NUT - heavy hex, self-locking, 3/4 inch NC

(1) For restriction indicator parts used on models without a turbocharger see figure 2-52.

NOTE: For restriction indicator parts used on models without a turbocharger see figure 2-52.

AIR RESTRICTION INDICATOR, MODELS WITH A TURBOCHARGER



AIR RESTRICTION INDICATOR, MODELS WITH A TURBOCHARGER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
	1	L60539X		UAR	TUBE - bulk, nylon, 1/8 (3 mm) ID x 168 inch (4267 mm) long

(1) For restriction indicator parts used on models without a turbocharger see figure 2-52.

NOTE: For restriction indicator parts used on models without a turbocharger see figure 2-52.

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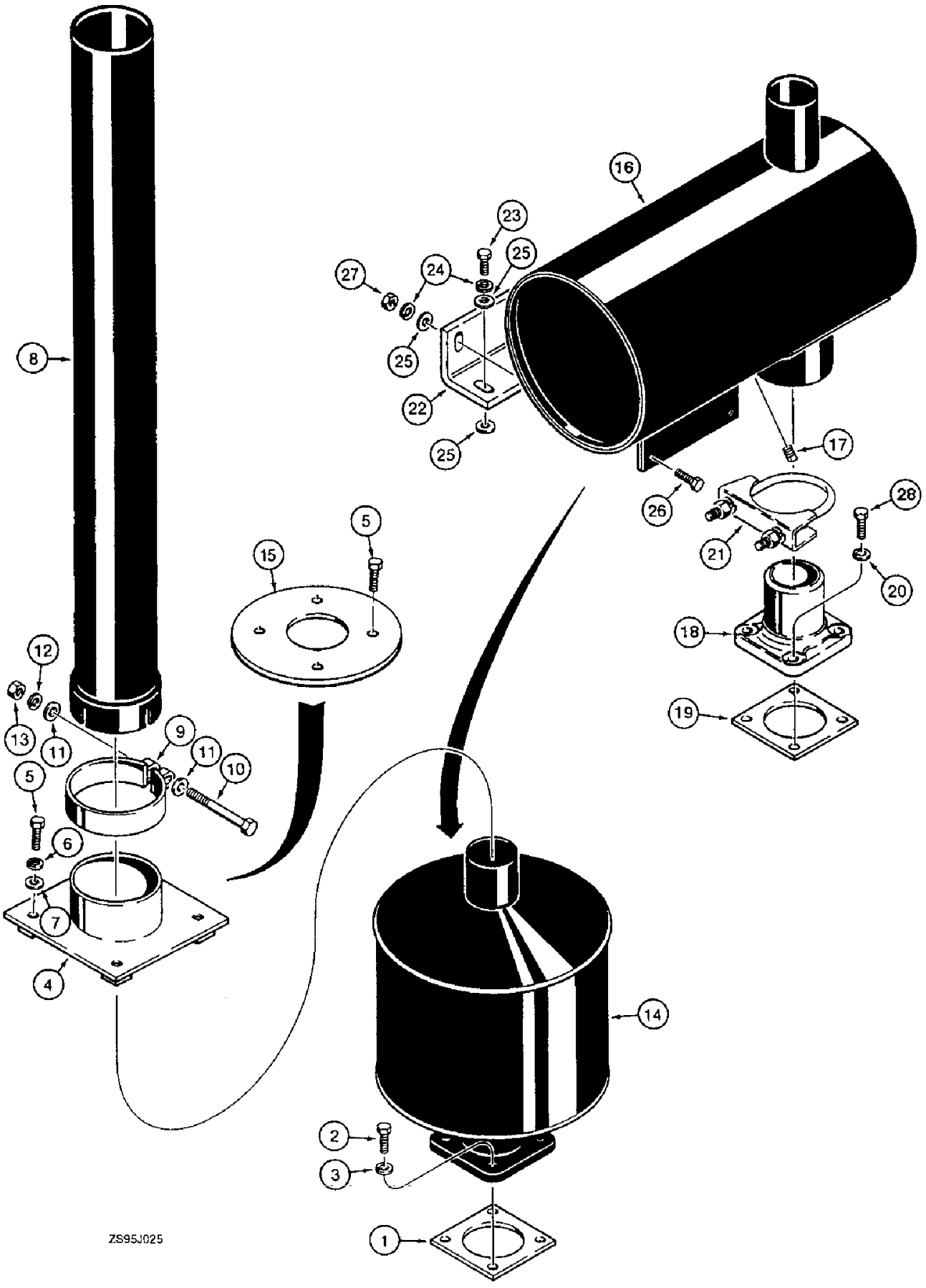
MUFFLER MOUNTING AND EXHAUST PARTS, MODELS WITHOUT A TURBOCHARGER



MUFFLER MOUNTING AND EXHAUST PARTS, MODELS WITHOUT A TURBOCHARGER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		J912220		1	GASKET - muffler, exhaust manifold
2		613-10025		4	BOLT Hex, M10 x 25, 8.8, Full Thd - hex, full threads, 10 - 1.5 x 25 mm
3		892-11010		4	LOCK WASHER M10
4		R42378		1	BRACKET - exhaust pipe
5		160-102		4	BOLT Hex Flg, 3/8"-16 x 1", G8, Full Thd
6		492-11038		4	LOCK WASHER 3/8"
7		D52275		4	WASHER - flat, special
8		R50444		1	PIPE - exhaust
9		R42854		1	CLAMP - exhaust pipe
10		113-2272		1	BOLT Hex, 3/8"-16 x 3 1/4", G5
11		195-81019		2	WASHER 3/8" - flat, 13/32 x 13/16 x 1/16 inch
12		492-11038		1	LOCK WASHER 3/8"
13		129-770		1	NUT 3/8"-16, G5 - hex, 3/8 inch NC
14		A172785		1	MUFFLER - standard, models without turbocharger, if used
15		182803A1		1	RING - exhaust support
16		A172489		1	MUFFLER - spark arrester
17		217-77		1	PLUG - square, 3/8 inch PT, brass, models with spark arrester muffler
18		A170611		1	ADAPTER - muffler, models with spark arrester
19		J912220		1	GASKET - adapter, models with spark arrester muffler
20		892-11010		4	LOCK WASHER M10 Models with spark arrester muffler M10
21		A62874		1	CLAMP - includes hardware, to adapter, models with spark arrester muffler
22		A172480		1	SUPPORT BRACKET - spark arrester muffler
23		614-10030		2	BOLT Hex, M10 x 30, 8.8 Full Thd, Models with spark arrester muffler Hex, M10 x 30, 8.8
24		892-11010		4	LOCK WASHER M10 Models with spark arrester muffler M10

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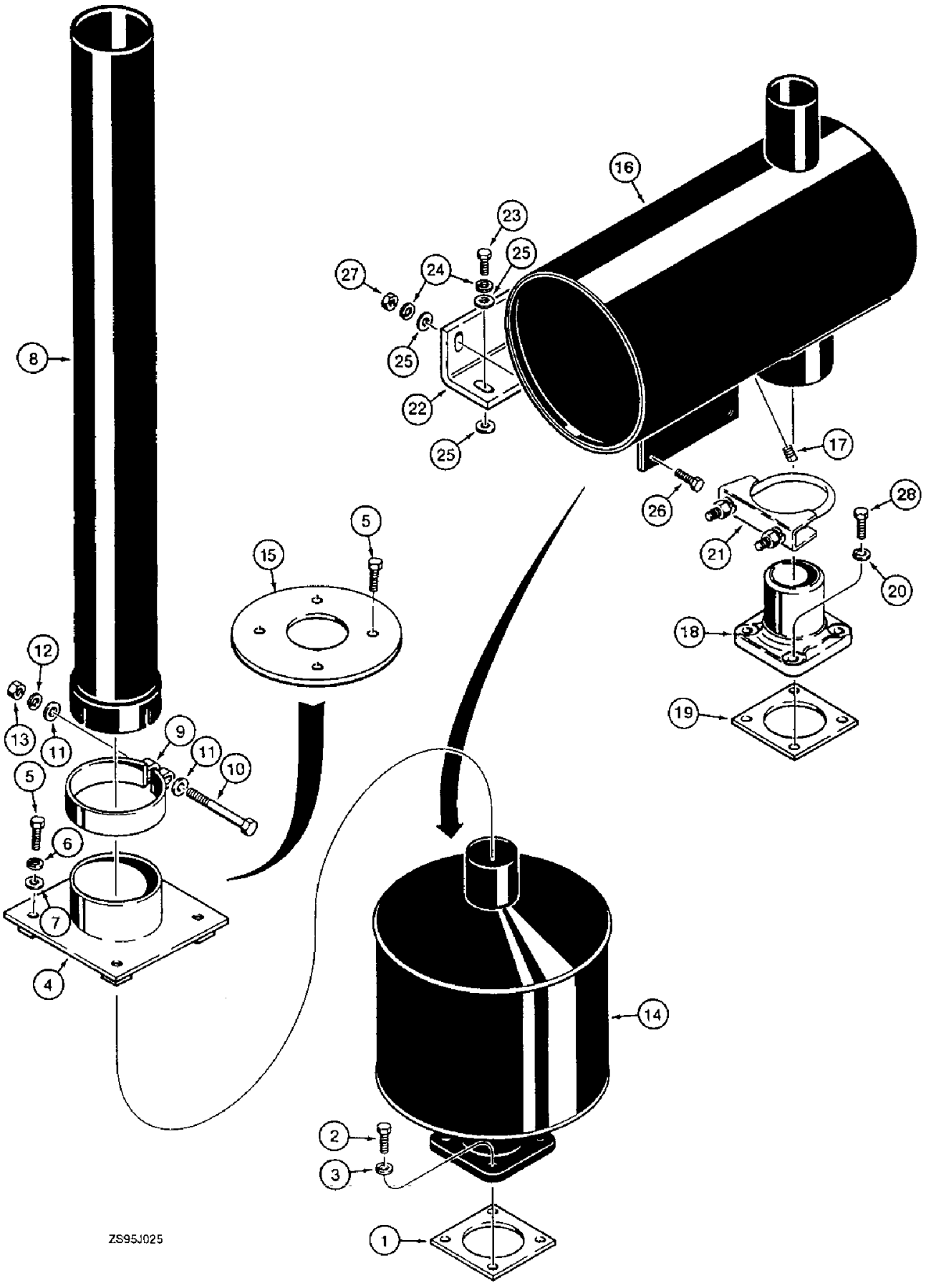
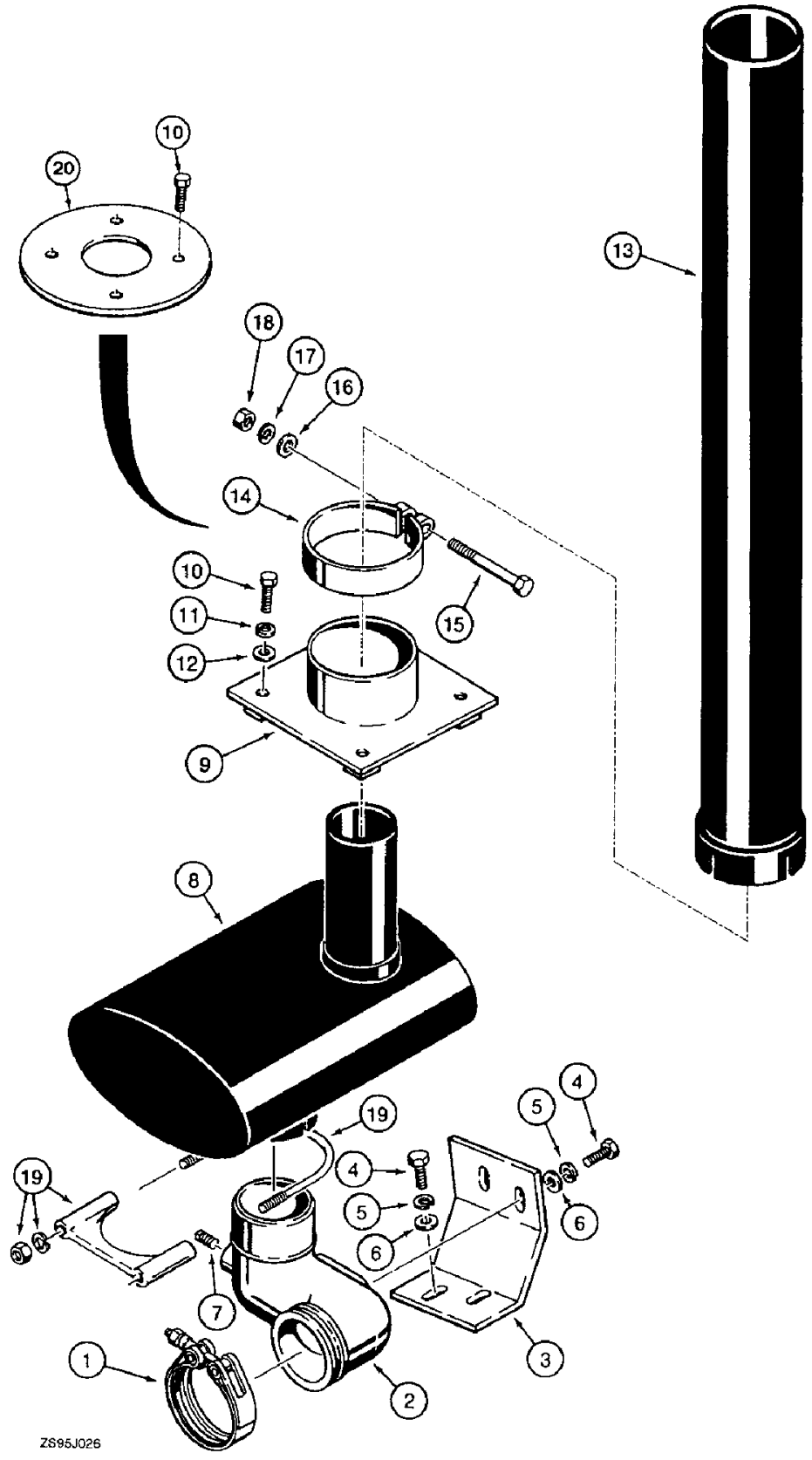
MUFFLER MOUNTING AND EXHAUST PARTS, MODELS WITHOUT A TURBOCHARGER



MUFFLER MOUNTING AND EXHAUST PARTS, MODELS WITHOUT A TURBOCHARGER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
25		D41740		6	WASHER - flat, special, hardened, models with spark arrester muffler
26		614-10030		2	BOLT Hex, M10 x 30, 8.8 Full Thd, Models with spark arrester muffler Hex, M10 x 30, 8.8
27		825-1410		2	NUT M10, Cl 8 Models with spark arrester muffler M10, Cl 8
28		613-10025		4	BOLT Hex, M10 x 25, 8.8, Full Thd - hex, full threads, 10 - 1.5 x 25 mm, models with spark arrester muffler

MUFFLER MOUNTING AND EXHAUST PARTS, MODELS WITH A TURBOCHARGER



MUFFLER MOUNTING AND EXHAUST PARTS, MODELS WITH A TURBOCHARGER

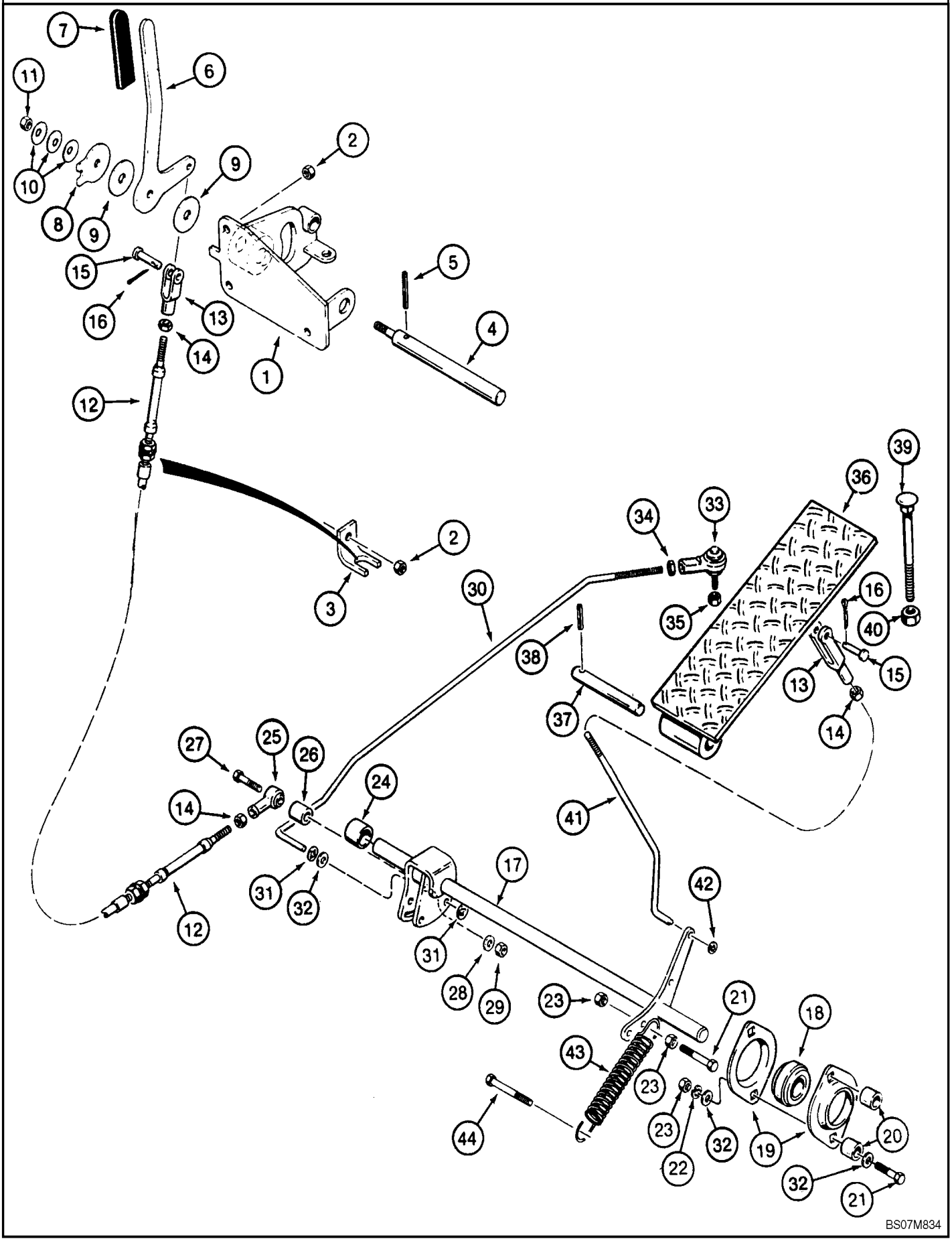
REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		A170467		1	CLAMP - tube, at turbocharger, includes hardware
2		A170987		1	ELBOW TUBE - elbow
3		A190798		1	SUPPORT BRACKET - mounting
4		613-10025		4	BOLT Hex, M10 x 25, 8.8, Full Thd - hex, full threads, 10 - 1.5 x 25 mm
5		892-11010		4	LOCK WASHER M10
6		D41740		4	WASHER - flat, special
7		221-841		1	PLUG - hex socket, 1/4 inch PT
8		A189478		1	MUFFLER - used on models with turbocharger
9		R42378		1	BRACKET - exhaust pipe
10		160-102		4	BOLT Hex Flg, 3/8"-16 x 1", G8, Full Thd
11		492-11038		4	LOCK WASHER 3/8"
12		D52275		4	WASHER - flat, special, hardened
13		R50444		1	PIPE - exhaust, muffler
14		R42854		1	CLAMP - exhaust pipe
15		113-2272		1	BOLT Hex, 3/8"-16 x 3 1/4", G5
16		195-81019		1	WASHER 3/8" - flat, 13/32 x 13/16 x 1/16 inch
17		492-11038		1	LOCK WASHER 3/8"
18		129-770		1	NUT 3/8"-16, G5 - hex, 3/8 inch NC
19		L14222		1	CLAMP ASSEMBLY - includes lock washers and nuts
20		182803A1		1	RING - exhaust support

SECTION INDEX

Fuel System

3-02	THROTTLE CONTROLS
3-04	FUEL TANK
3-06	FUEL LINES
3-08	FUEL INJECTION SYSTEM, 4-390 ENGINE, 4T-390 ENGINE
3-10	FUEL FILTER, 4-390 ENGINE, 4T-390 ENGINE
3-12	FUEL INJECTION PUMP AND DRIVE, 4-390 ENGINE, 4T-390
3-14	FUEL INJECTION NOZZLE, 4-390 ENGINE, 4T-390 ENGINE

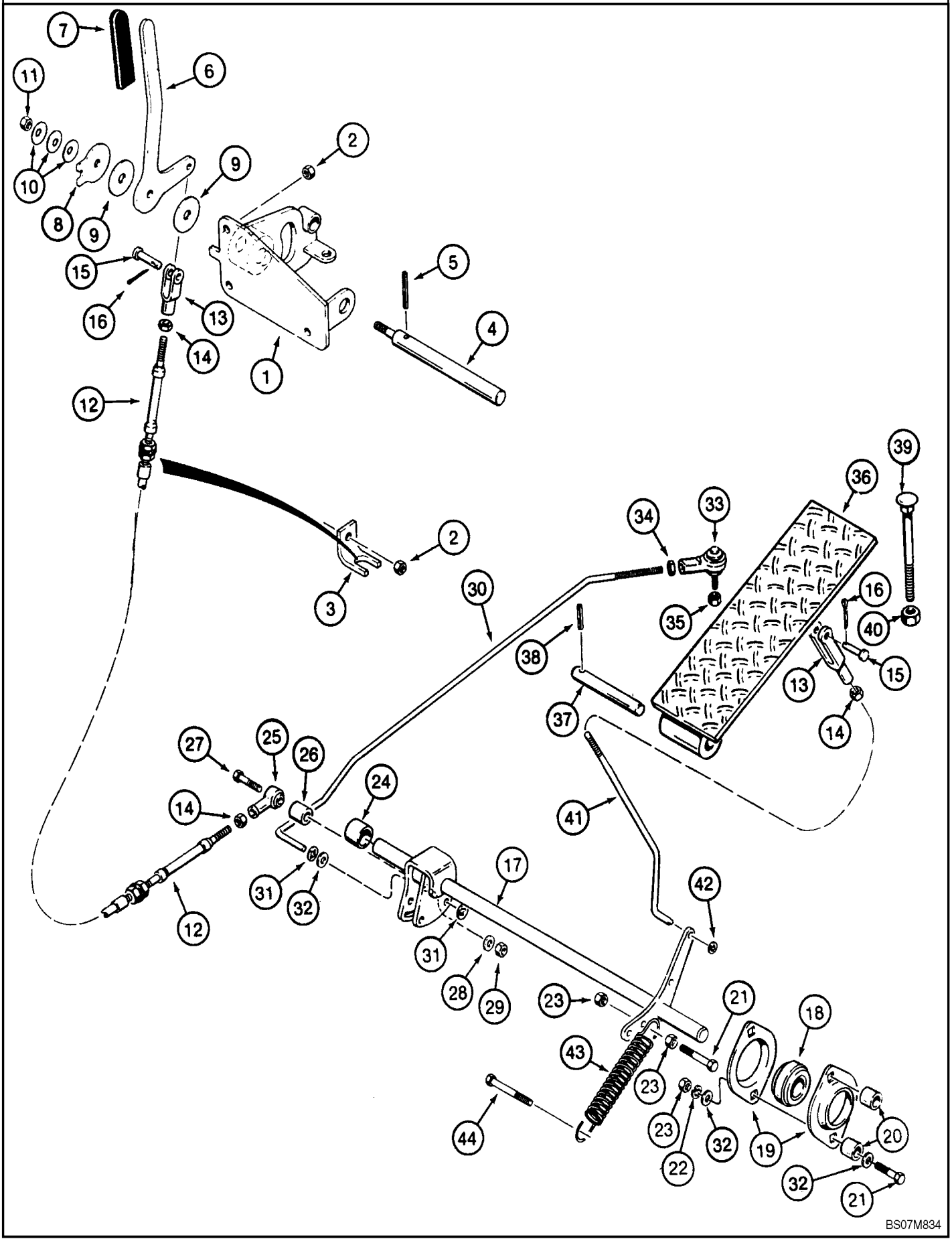
THROTTLE CONTROLS



THROTTLE CONTROLS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58310		1	BRACKET - mounting, throttle and transmission controls, see figures 6-46 and 6-48 for transmission control components
2		231-1446		4	NUT 3/8"-16, GB NUT - hex, self-locking, 3/8 inch NC
3		{R52478}		1	- cable support
4		R57937		1	SHAFT - pivot
5		38-11632		1	LOCK PIN 1/4" x 2", Slotted PIN, LOCK, 1/4" x 2", Slotted
6		R57933		1	LEVER - throttle control
7		R52376		1	MOLDING GRIP - control lever
8		R57932		1	LARGE PLATE PLATE - friction disc
9		R52389		2	DISC - friction
10		R58742		3	WASHER - Belleville, throttle lever mounting
11		131-463		1	NUT 3/8"-16 NUT - heavy hex, self-locking, 3/8 inch NC
12		R57954		1	CABLE - hand throttle control
13		213-125		2	ADJUSTABLE CLEVIS 5/16"-24 CLEVIS - adjustable, 5/16 inch NF
14		425-115		3	NUT 5/16"-24, G5 - hex, 5/16 inch NF
15		427-5094		2	CLEVIS PIN 5/16" x .940", HDN PIN - clevis, 5/16 x 15/16 inch, hardened
16		32-612		2	COTTER PIN 3/32" x 3/4" PIN, SPLIT (COTTER), 3/32" x 3/4"
17		R58612		1	SHAFT - cross, throttle control
18		468390R92		2	BEARING 0.6255" ID x 40 mm OD x 0.75" - ball, throttle shaft
19		F13526		4	FLANGED BEARING FLANGE - bearing, cross shaft
20		D34162		4	SPACER - flange
21		413-424		5	BOLT Hex, 1/4"-20 x 1 1/2", G5
22		492-11025		4	LOCK WASHER 1/4" WASHER, LOCK, 1/4"
23		425-104		6	NUT 1/4"-20, G5 - hex, 1/4 inch NC
24		1334638C1		1	SPACER - cable control lever
25		R47498		1	END - throttle cable
26		F13386		1	SPACER - ball joint end
27		413-532		1	BOLT Hex, 5/16"-18 x 2", G5

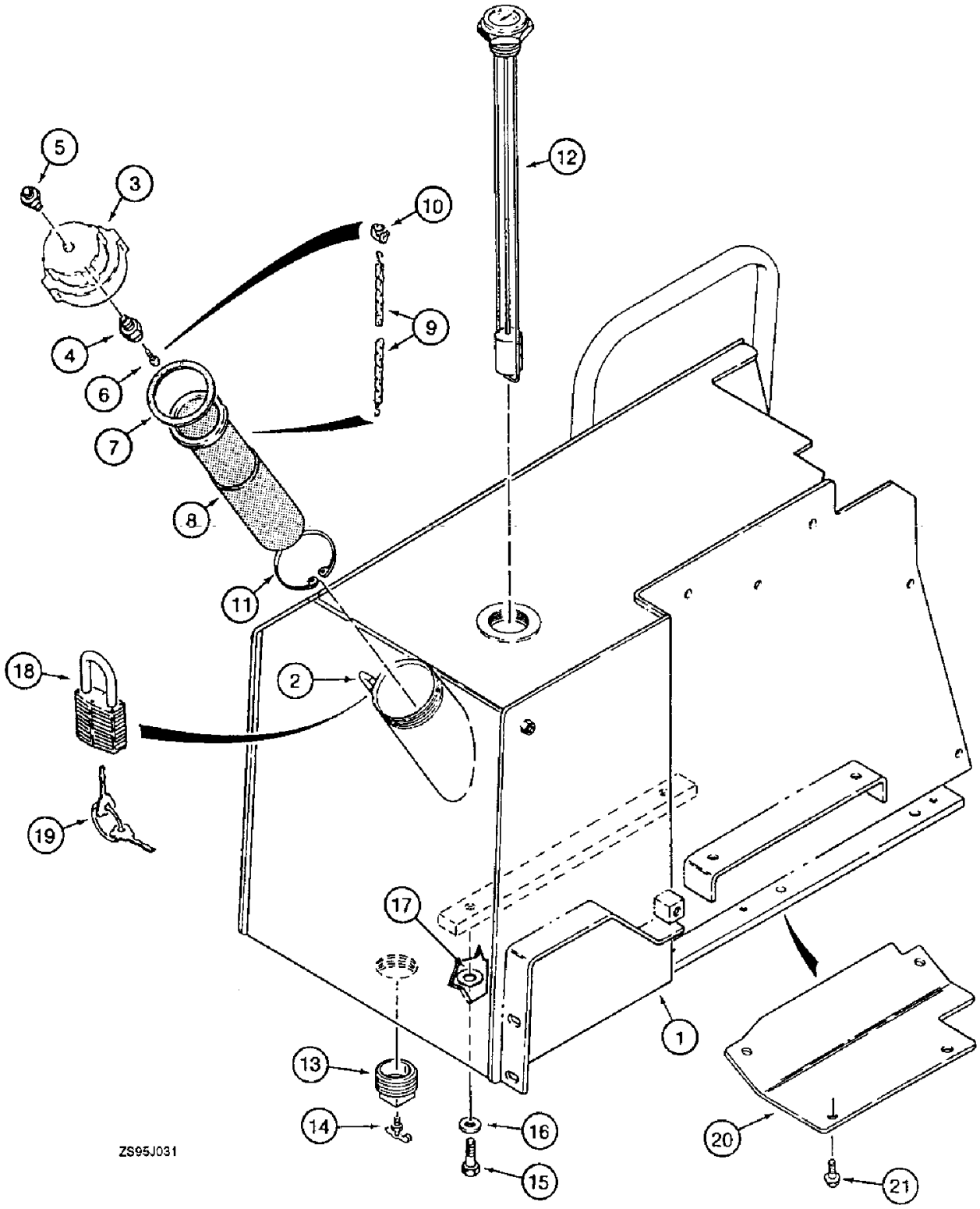
THROTTLE CONTROLS



THROTTLE CONTROLS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
28		495-11034		1	WASHER 5/16", SAE 5/16" SAE (flat, 11/32 x 11/16 x 1/16")
29		231-1445		1	NUT 5/16"-18, GB NUT - hex, self-locking, 5/16 inch NC
30		R58718		1	ROD - throttle, at injection pump, models without decelerator
30A		101775A1		1	ROD - throttle, at injection pump, models with decelerator, if used, not shown
31		100-1425		2	SNAP RING #25, Ext Ring, Snap, #25, Ext
32		495-11028		9	WASHER 1/4", SAE (flat, 9/32 x 5/8 x 1/16") 1/4", SAE
33		A10329		1	BALL JOINT JOINT - ball, 1/4 inch NF, throttle rod
34		425-114		1	NUT 1/4"-28, G5
35		131-498		1	LOCK NUT 1/4"-28, GB NUT - hex, self-locking, 1/4 inch NF
36		R26937		1	PEDAL - foot throttle, units without decelerator
36A		R57935		1	PEDAL - foot throttle, units with decelerator, if used, not shown
37		R17364		1	SHAFT - pedal
38		38-11016		1	LOCK PIN 5/32" x 1", Slotted Pin, 5/32" x 1", Slotted
39		411-864		1	CARRIAGE BOLT Short NK, 1/2"-13 x 4", G2 BOLT - carriage, 1/2 NC x 4 inch, grade 2, accelerator stop
40		425-108		1	NUT 1/2"-13, G5 NUT, , Hex 1/2"-13, G5
41		R58645		1	ROD - throttle, units without decelerator
41A		R58646		1	ROD - throttle, units with decelerator, if used, not shown
42		100-1431		2	SNAP RING #31, Ext Ring, Snap, #31, Ext
43		R36912		1	SPRING - return
44		413-644		1	BOLT Hex, 3/8"-16 x 2 3/4", G5 - hex, 3/8 NC x 2-3/4 inch

FUEL TANK

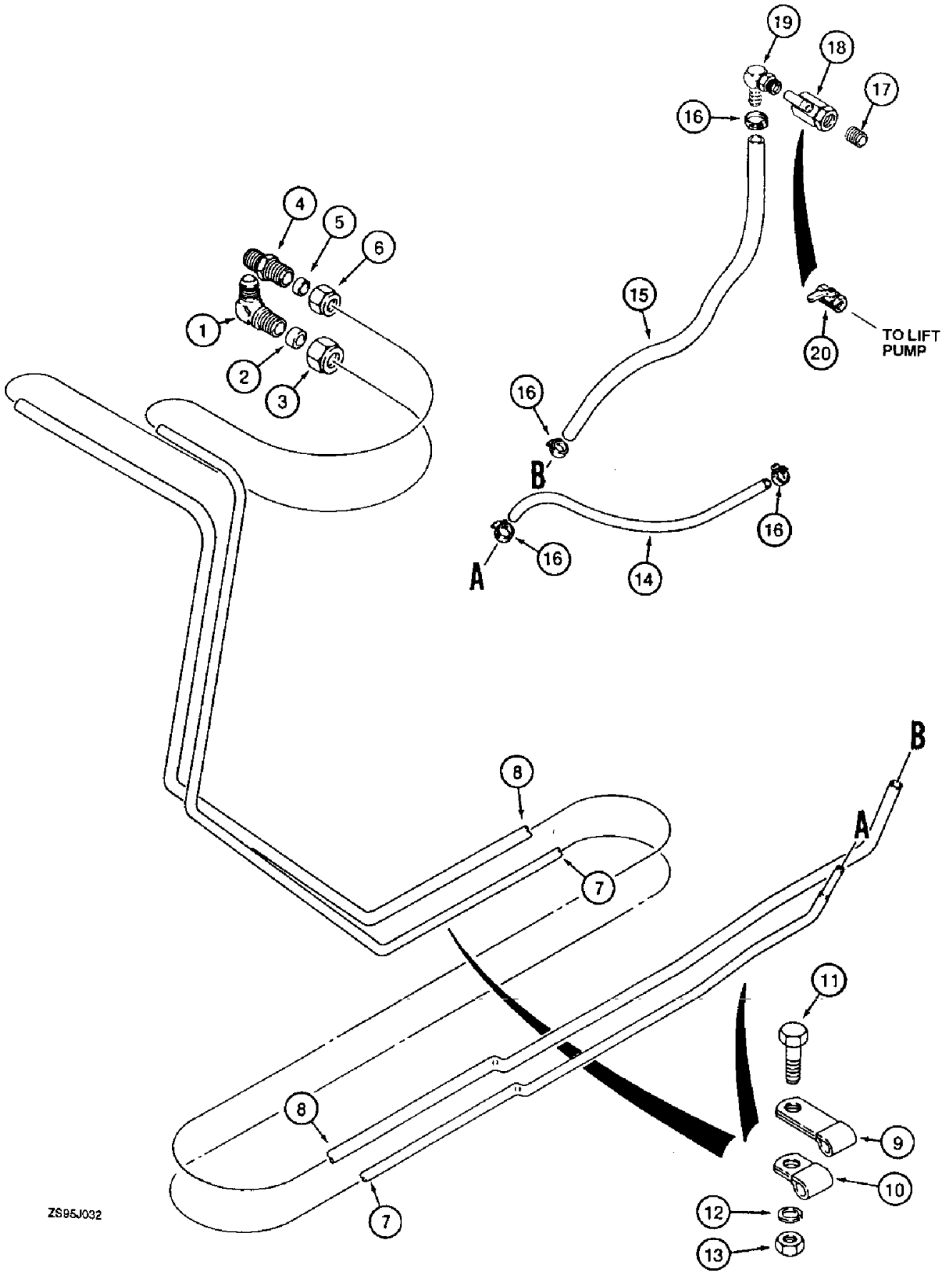


FUEL TANK

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58151		1	TANK ASSEMBLY - fuel
2		R46704		1	BRACKET TAB - locking, fuel cap, weld on
		R57981		1	FILLER CAP CAP ASSEMBLY- fuel tank
3		NSS		1	NOT SERVICED SEPARATELY CAP - fuel tank
4		A50096		1	VALVE - relief, fuel tank
5		R57888		1	FILTER - air inlet, fuel tank
6		301-14712		1	SCREW Drive, #12 x 3/4" - drive, round head, No. 12 x 3/4 inch
7		R49868		1	GASKET - rubber, fuel cap
8		R51771		1	STRAINER ASSY. STRAINER - fuel
9		R47786		1	CHAIN (CE) CHAIN - filler
10		R48634		1	FASTENER HOOK - chain
11		103-21300		1	SNAP RING 3.00", Int, #300 Ring, Snap, , Fuel strainer, chain 3.00", Int, #300
12		R28475		1	FUEL GAUGE GAUGE - fuel tank
13		R27578		1	PLUG - drain
14		217-81		1	VALVE - drain, 1/8 inch PT, drain , fuel tank
15		413-820		4	BOLT Hex, 1/2"-13 x 1 1/4", G5, Full Thd - hex, 1/2 NC x 1-1/4 inch
16		496-21053		4	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened
17		D44330		UAR	SHIM .031" Thk (21/32" ID x 1-1/4" OD) .031" Thk
18		D93753		1	PADLOCK - includes keys, if used
19		R29555		2	KEY - for Master padlock only
19		D93751		2	SET OF 2 KEYS KEY - for Yale padlock only
20	1	R58566		1	GUARD COVER - transmission controls, lower
21		160-106		4	BOLT Hex Flg, 1/2"-13 x 1", G8, Full Thd

(1) See Figure 6-46 items 55, 55A and 56 for top and front console covers.

FUEL LINES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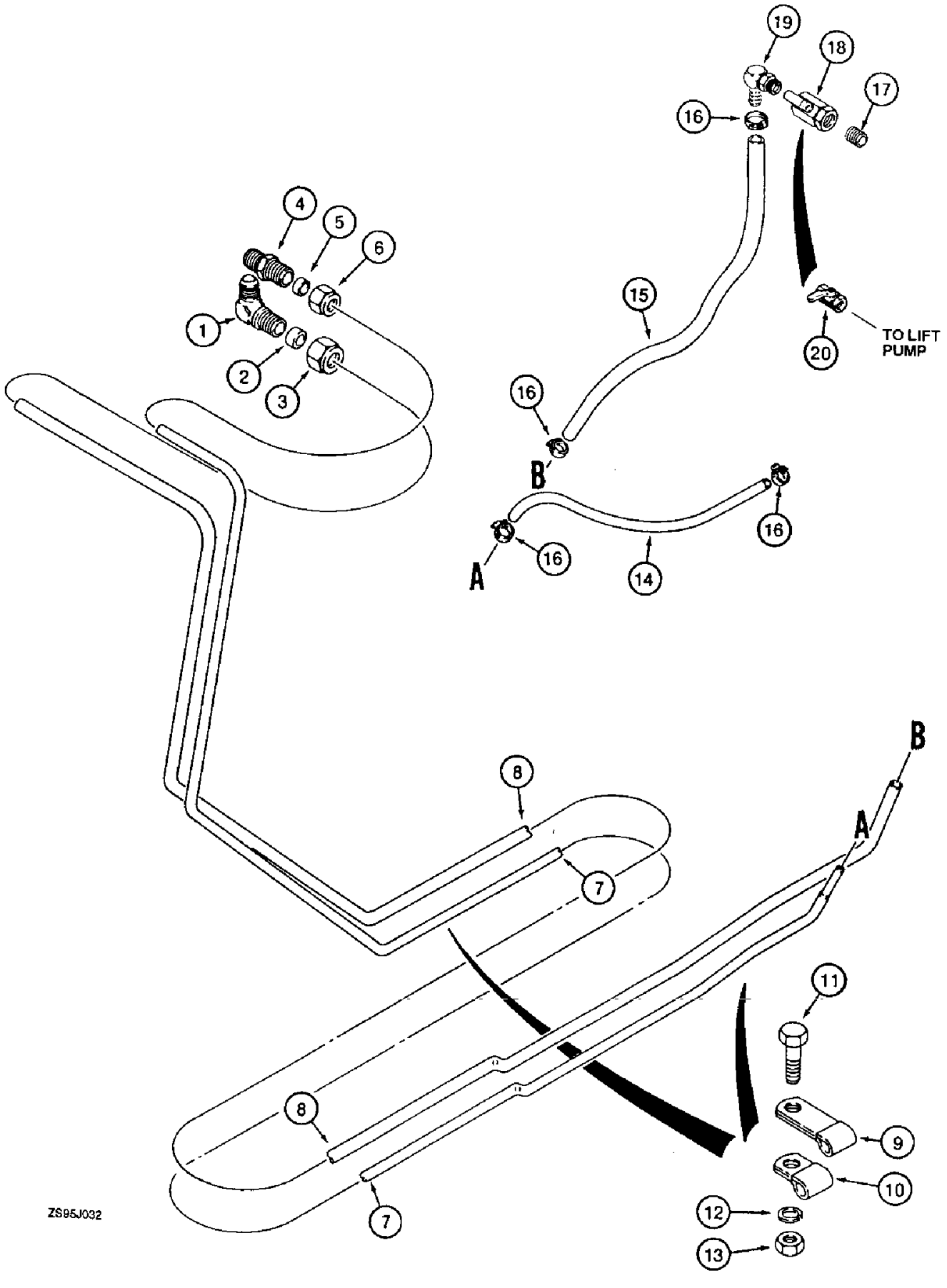
FUEL LINES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		222-45		1	ELBOW 90º, 9/16"-24 Fem x 1/4"-27 NPTF - 90 degree, compression, 5/16 tube OD x 1/4 inch PT
1		NSS		1	NOT SERVICED SEPARATELY BODY - elbow
2		222-103		1	SLEEVE 5/16" Tube 5/16 inch tube OD
3		222-113		1	TUBE NUT 9/16"-24 NUT - hex, 5/16 tube OD x 9/16-24 inch
		222-23		1	FITTING 1/2"-24 x 1/4" NPTF w/Nut ADAPTER - compression, 1/4 tube OD x 1/4 inch PT, return tube
4		NSS		1	NOT SERVICED SEPARATELY BODY - adapter
5		222-102		1	SLEEVE 1/4" Tube
6		87017024		1	TUBE NUT 1/2"-24 NUT - hex, 1/4 tube OD x 1/2-24 inch
7		R58730		1	FUEL TUBE 0.25" OD TUBE - upper, fuel return, 1/4 inch OD
8		R58729		1	FUEL TUBE 0.312" OD TUBE - lower, fuel supply, 5/16 inch OD
9		R13002		2	CLAMP - 1/4 inch
10		515-2379		2	CLAMP 5/16", Insul, 3/8" Bolt P-type 5/16", Insul, 3/8" Bolt
11		413-620		2	BOLT Hex, 3/8"-16 x 1 1/4", G5, Full Thd - hex, 3/8 NC x 1-1/4 inch
12		492-11038		2	LOCK WASHER 3/8"
13		425-106		2	NUT 3/8"-16, G5
14		R50624		1	FUEL HOSE 4.76 mm ID x 150.00 mm, SAE 30R1 Return, Filter to Fuel Tank 4.76 mm ID x 150.00 mm, SAE 30R1
15		D34989		1	FUEL HOSE 0.31" ID x 9.00", SAE 30R1 Supply, Fuel Tank To Lift Pump, Cut From S120317X Hose, See Below 0.31" ID x 9.00", SAE 30R1
16		214-1404		4	HOSE CLAMP #4, 0.25/0.62 Type M Worm CLAMP - adj, 1/4 - 5/8 inch dia, Type F

FUEL LINES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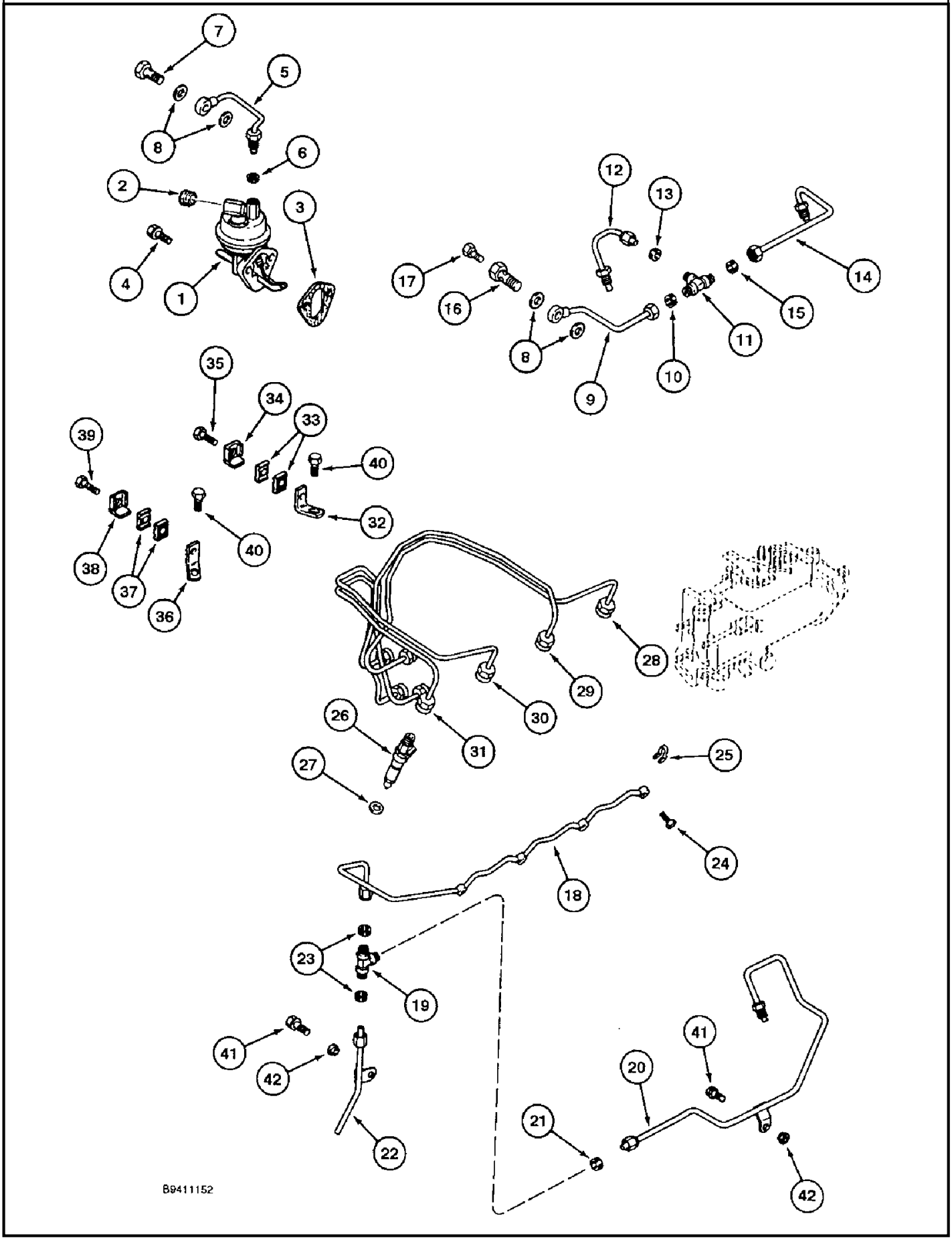
FUEL LINES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
17	1	221-130		1	PIPE Nipple, 1/4" NPT x 7/8" NIPPLE - straight, 1/4 PT x 7/8 inch, used with R47797
18		R47797		1	VALVE - shutoff, fuel, at lift pump, if used
19		217-295		1	FITTING 90º, 5/16" Hose x 1/4" NPTF, Barbed ELBOW - 90 degree, 5/16 stem end x 1/4 inch PT, at fuel lift pump
20		113092A1		1	VALVE - shutoff, fuel, if used
		S120317X		UAR	HOSE - bulk, 5/16 (8) x 9/16 (14) x 300 inch (7620 mm) long

(1) Ref. #17 is not used with Ref. #20

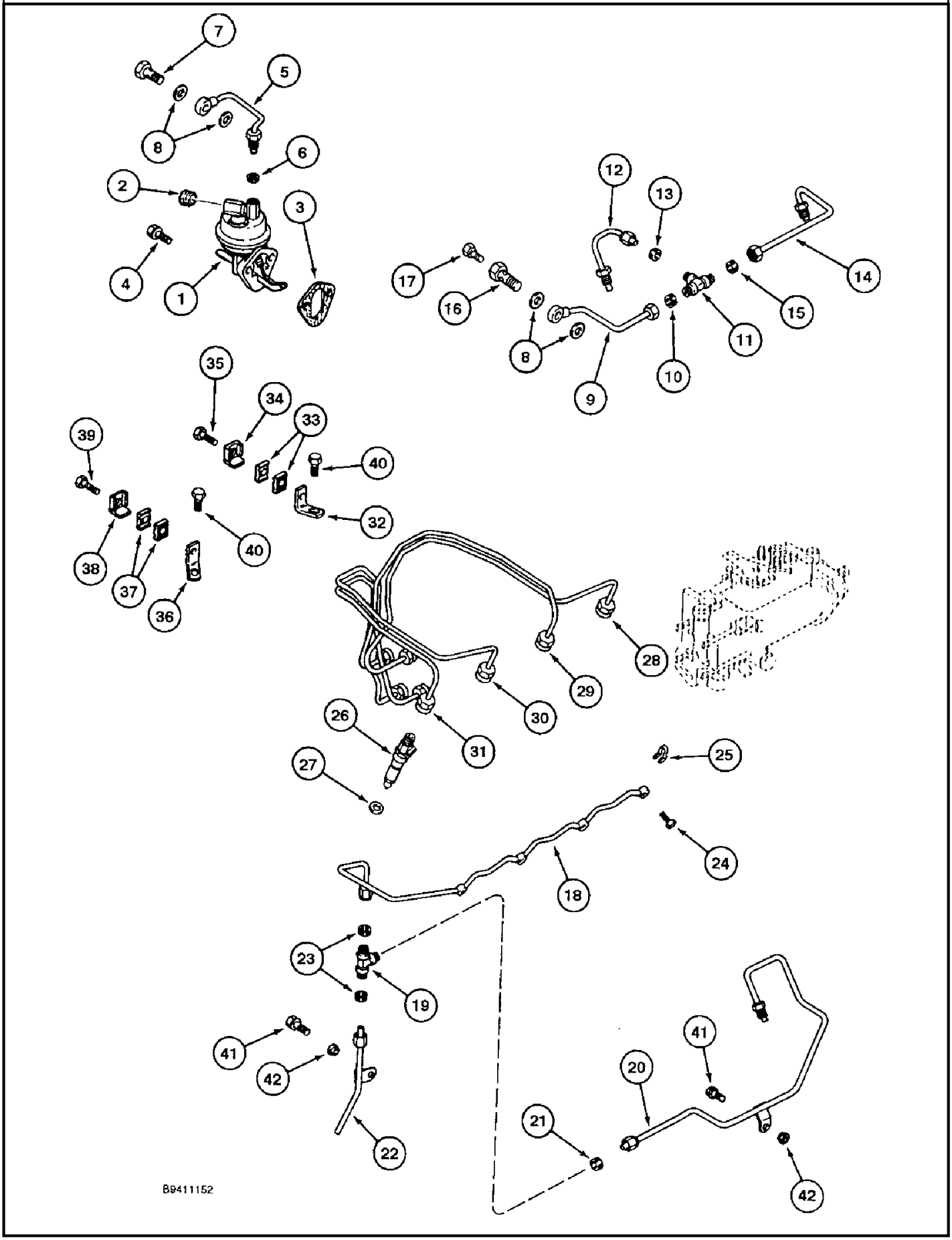
FUEL INJECTION SYSTEM, 4-390 ENGINE, 4T-390 ENGINE



FUEL INJECTION SYSTEM, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		J904374		1	PUMP - lift, fuel
2		221-841		1	PLUG - hex socket, 1/4 inch PT, fuel inlet
3		J923054		1	GASKET - mounting, fuel transfer pump, replaces J914304 gasket
4		845-8020		2	BOLT Hex Flg, M8 x 20, 8.8, Full Thd - heavy hex flange, 8 - 1.25 x 20 mm
5		J905649		1	FUEL TUBE 8 mm OD x 233.5 mm L TUBE ASSEMBLY - fuel supply, lift pump to filter
6		222-101		1	SLEEVE 3/16" Tube - 3/16 inch tube OD
7		J903035		1	BANJO BOLT BOLT - banjo hex, 12 - 1.5 x 24 mm
8		J918191		4	PACKING RING WASHER - sealing, special, 12 x 18 x 1 mm, replaces J903037 washer
9		J905364		1	FUEL TUBE TUBE ASSEMBLY - fuel supply
10		222-103		1	SLEEVE 5/16" Tube 5/16 inch tube OD
11		J905353		1	TEE - 9/16 inch NF (remove and discard nuts before assembly)
12		J905375		1	FUEL TUBE 8 mm OD x 137.6 mm L TUBE ASSEMBLY - fuel supply, tee to rear of injection pump
13		222-103		1	SLEEVE 5/16" Tube 5/16 inch tube OD
14		J905363		1	FUEL TUBE 8 mm OD x 256.8 mm L TUBE - fuel supply, tee to front of injection pump
15		222-103		1	SLEEVE 5/16" Tube 5/16 inch tube OD
		J905860		1	SCREW BOLT ASSEMBLY - banjo hex, special
16		NSS		1	NOT SERVICED SEPARATELY BOLT - connector, banjo hex, special
17		NSS		1	NOT SERVICED SEPARATELY SCREW - hex, special, vent
18		J909695		1	FUEL TUBE TUBE - manifold, fuel drain

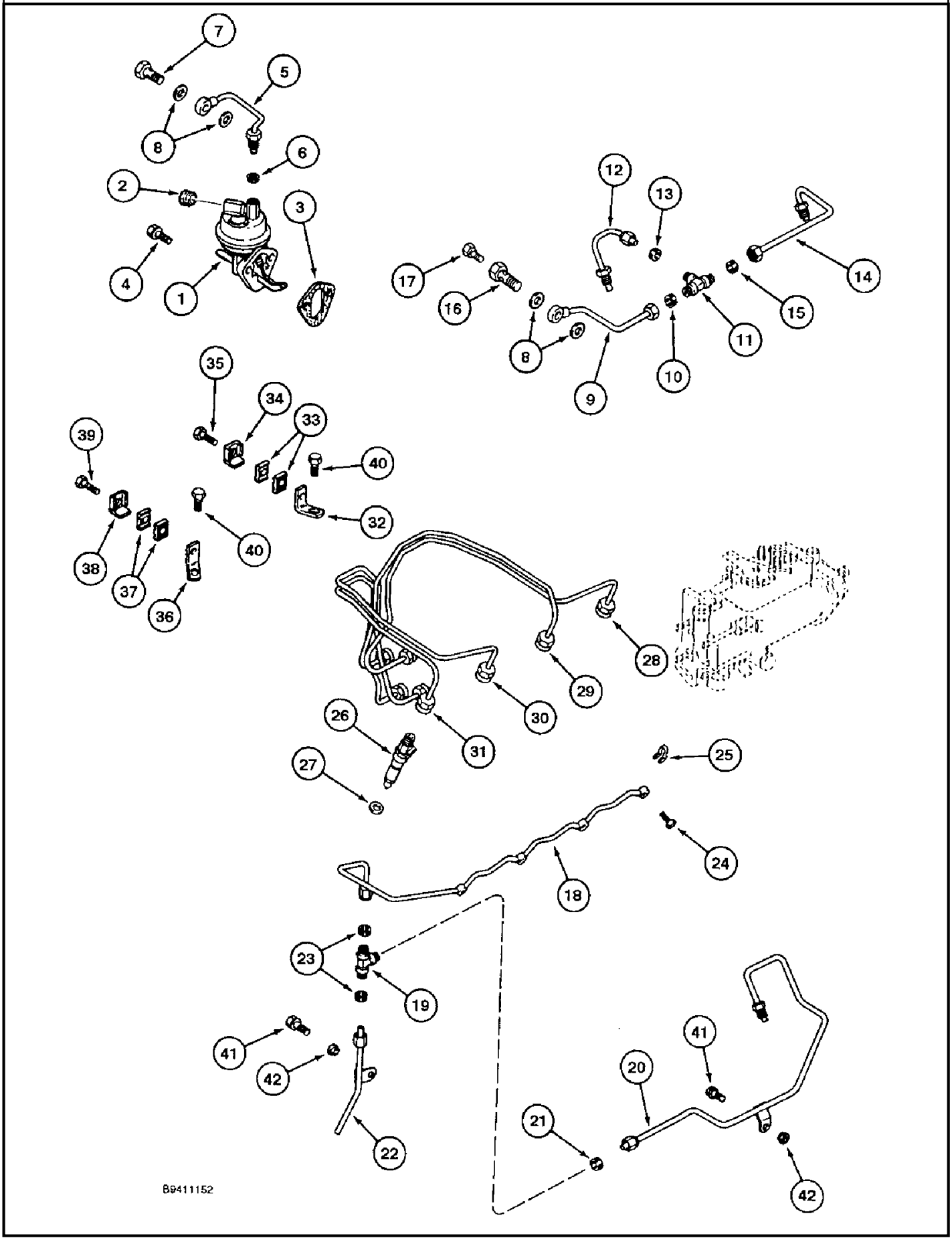
FUEL INJECTION SYSTEM, 4-390 ENGINE, 4T-390 ENGINE



FUEL INJECTION SYSTEM, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
19		222-121		1	TEE 3/16", Flex Tubing 3/16", Flex Tubing (Remove and discard nuts before assembly)
20		J925882		1	FUEL TUBE 4.76 mm OD x 662.1 mm L TUBE ASSEMBLY - fuel return, tee to pump replaces J905703 tube assembly
21		222-101		1	SLEEVE 3/16" Tube - 3/16 inch tube OD, replaces 222-103 sleeve
22		J905692		1	FUEL TUBE TUBE - fuel return, tee to fuel tank
23		222-101		2	SLEEVE 3/16" Tube - 3/16 inch tube OD
24		J905307		4	BANJO BOLT M6 x 1 x 14.3 BOLT, BANJO, , Drain, Special M6 x 1 x 14.3
25		J903380		4	SEAL - connector
26		REF		4	INSTRUCTION INJECTOR ASSEMBLY - fuel, see figure 3-14
27		J906659		1	SEAL - injector nozzle, 7 mm injector tip
28		J903522		1	FUEL TUBE 2 mm ID x 6.4 mm OD x 643.1 mm L TUBE - fuel injector, No. 1 cylinder
29		J903523		1	FUEL TUBE 2 mm ID x 6.4 mm OD x 645.3 mm L TUBE - fuel injector, No. 2 cylinder
30		J903524		1	FUEL TUBE TUBE - fuel injector, No. 3 cylinder
31		J903525		1	FUEL TUBE TUBE - fuel injector, No. 4 cylinder
32		J919294		1	SUPPORT BRACKET - fuel tube, No. 1 and 2
33		J917746		2	CLAMP - fuel tube
34		{J904711}		1	BRACKET - fuel tube
35		J920854		1	CAPTIVE WASHER SCREW Hex Hd, M5 x .8 x 20, w/LW SCREW, , Replaces J917712 bolt and J903723 washer Hex Hd, M5 x .8 x 20, w/LW
36		J919292		1	SUPPORT BRACKET - fuel tube
37		J917746		2	CLAMP - fuel tube
38		{J904711}		1	BRACKET - fuel tube

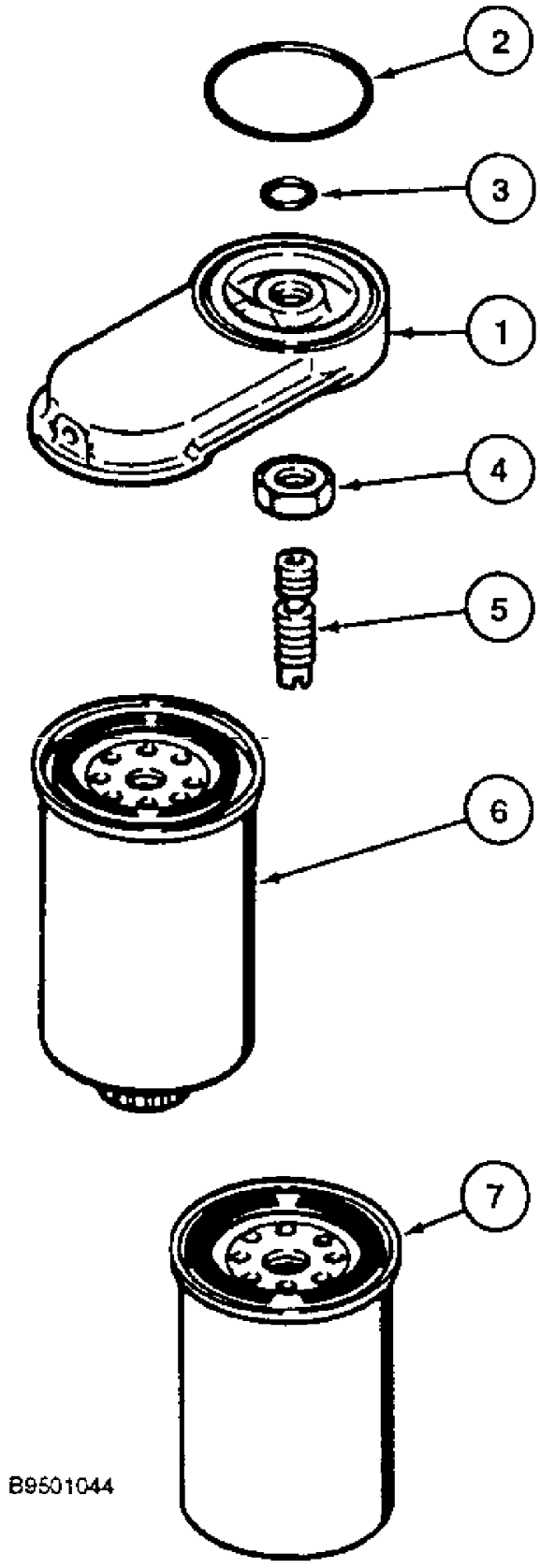
FUEL INJECTION SYSTEM, 4-390 ENGINE, 4T-390 ENGINE



FUEL INJECTION SYSTEM, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
39		J920854		1	CAPTIVE WASHER SCREW Hex Hd, M5 x .8 x 20, w/LW SCREW, , Replaces J917712 bolt and J903723 washer Hex Hd, M5 x .8 x 20, w/LW
40		J918109		2	FLANGE BOLT Hex Flg Hd, M8 x 1.25 x 25 SCREW, , Special Hex Flg Hd, M8 x 1.25 x 25
41		845-8016		2	BOLT Hex Flg, M8 x 16, 8.8, Full Thd - heavy hex flange, 8 - 1.25 x 16 mm
42		J900267		2	SEAL - cover bolt

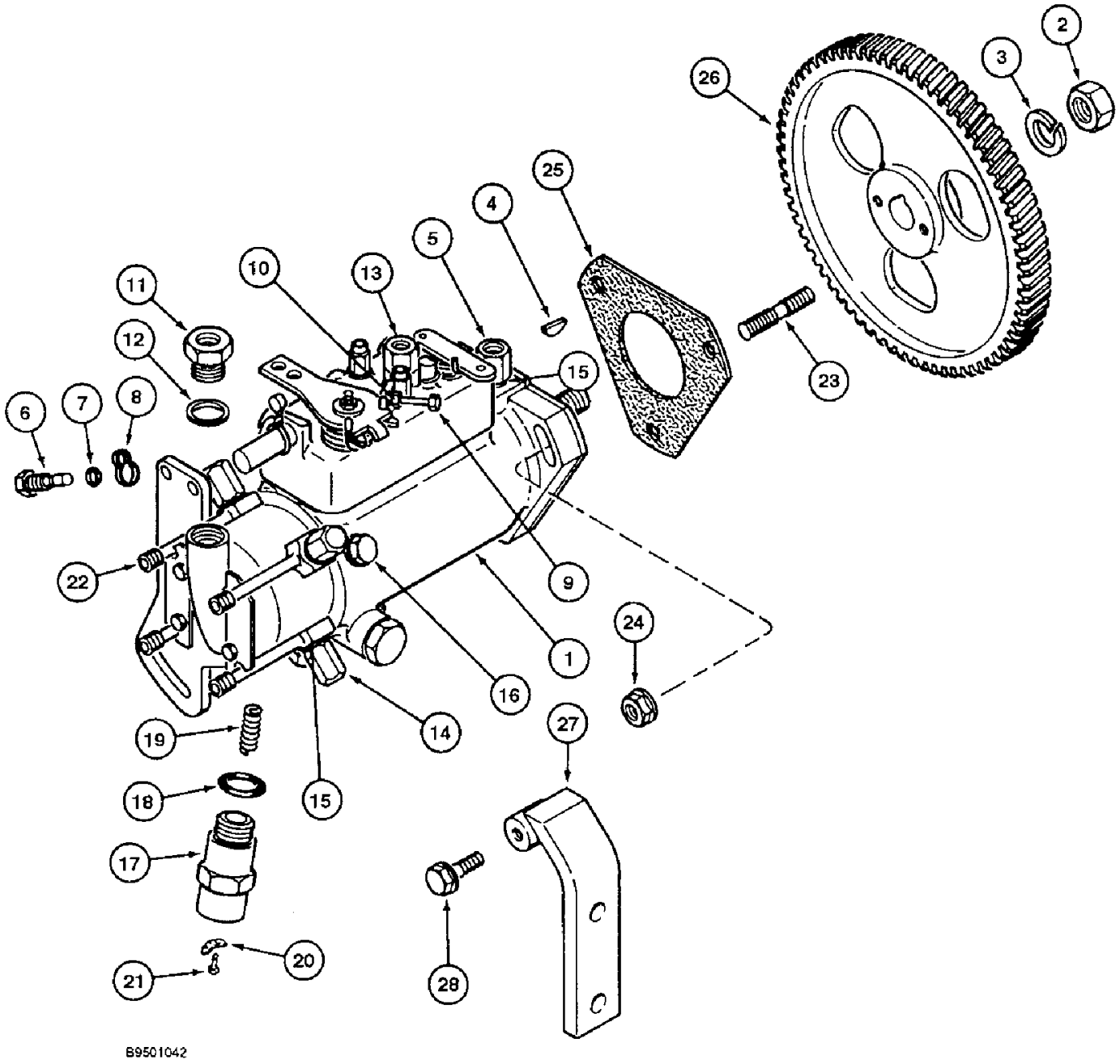
FUEL FILTER, 4-390 ENGINE, 4T-390 ENGINE



FUEL FILTER, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		J915240		1	SUPPORT HEAD - fuel filter
2		J906694		1	SEALING RING O-RING - sealing, 70 mm ID
3		J906695		1	SEAL O-RING - sealing, 14 mm ID
4		J903293		1	JAM NUT - hex, special, 16 mm - 2.0
5		J925955		1	ADAPTER - fuel filter, replaces J903845 adapter
		A77470		1	SEPARATOR KIT - fuel filter
6		J925274		1	FILTER, FUEL FILTER - fuel, primary, replaces J903410 filter
7		J903640		1	FILTER, FUEL FILTER - fuel

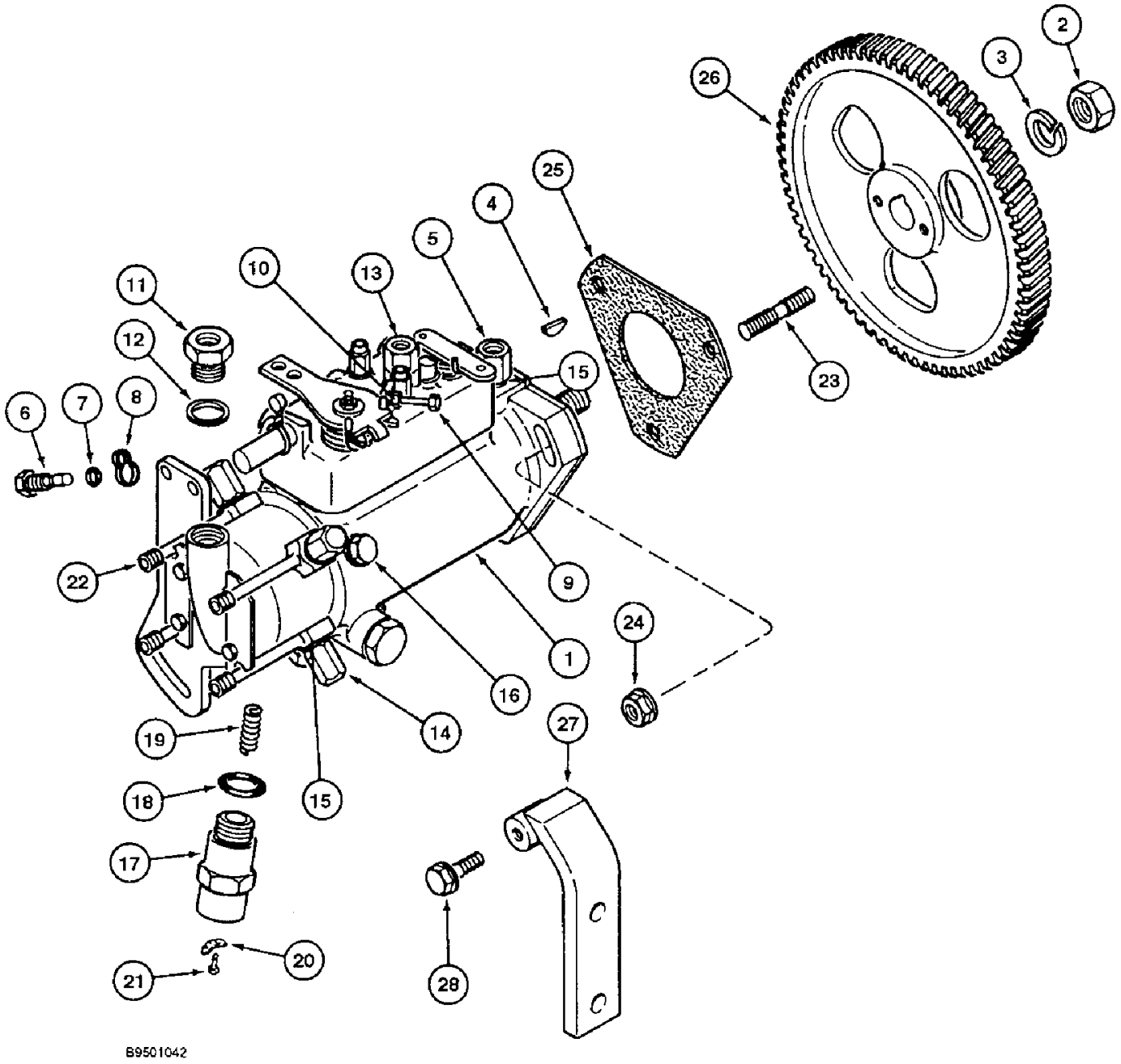
FUEL INJECTION PUMP AND DRIVE, 4-390 ENGINE, 4T-390 ENGINE



FUEL INJECTION PUMP AND DRIVE, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		J916523		1	PUMP, FUEL INJECTION PUMP, INJECTION PUMP ASSEMBLY - fuel injection, new, 4-390 engine
		JR916523		1	REMAN-INJECTION PUMP PUMP ASSEMBLY - fuel injection, remanufactured, North America only, component parts shown on this figure do not apply to the remanufactured assembly, 4-390 engine
		JC916523		1	CORE-INJECTION PUMP RETURN NUMBER - use this part number to return pump core for credit when using a remanufactured assembly
1		J917063		1	PUMP, FUEL INJECTION PUMP, INJECTION PUMP ASSEMBLY - fuel injection, new, 4T-390 engine
		JR917063		1	REMAN-INJECTION PUMP PUMP ASSEMBLY - fuel injection, remanufactured, North America only, component parts shown on this figure do not apply to the remanufactured assembly, 4T-390 engine
		JC917063		1	CORE-INJECTION PUMP Return number - For N.A. only
		JC915883		1	CORE-INJECTION PUMP RETURN NUMBER - use this part number to return pump core for credit when using a remanufactured assembly
2		J903738		1	NUT NUT - hex, special, 14 mm - 2.0
3		492-11056		1	LOCK WASHER 9/16" WASHER, LOCK, 9/16"
4		836-4065		1	WOODRUFF KEY M4 x 6.5 x 15.72 WOODRUFF KEY, , Pump gear M4 x 6.5 x 15.72
5		J904643		1	FITTING FITTING - return
6		J904778		1	BOLT BOLT - hex, special, locking device
7		J904780		1	SEAL SEAL - locking bolt
8		J904779		1	WASHER WASHER - locking, special

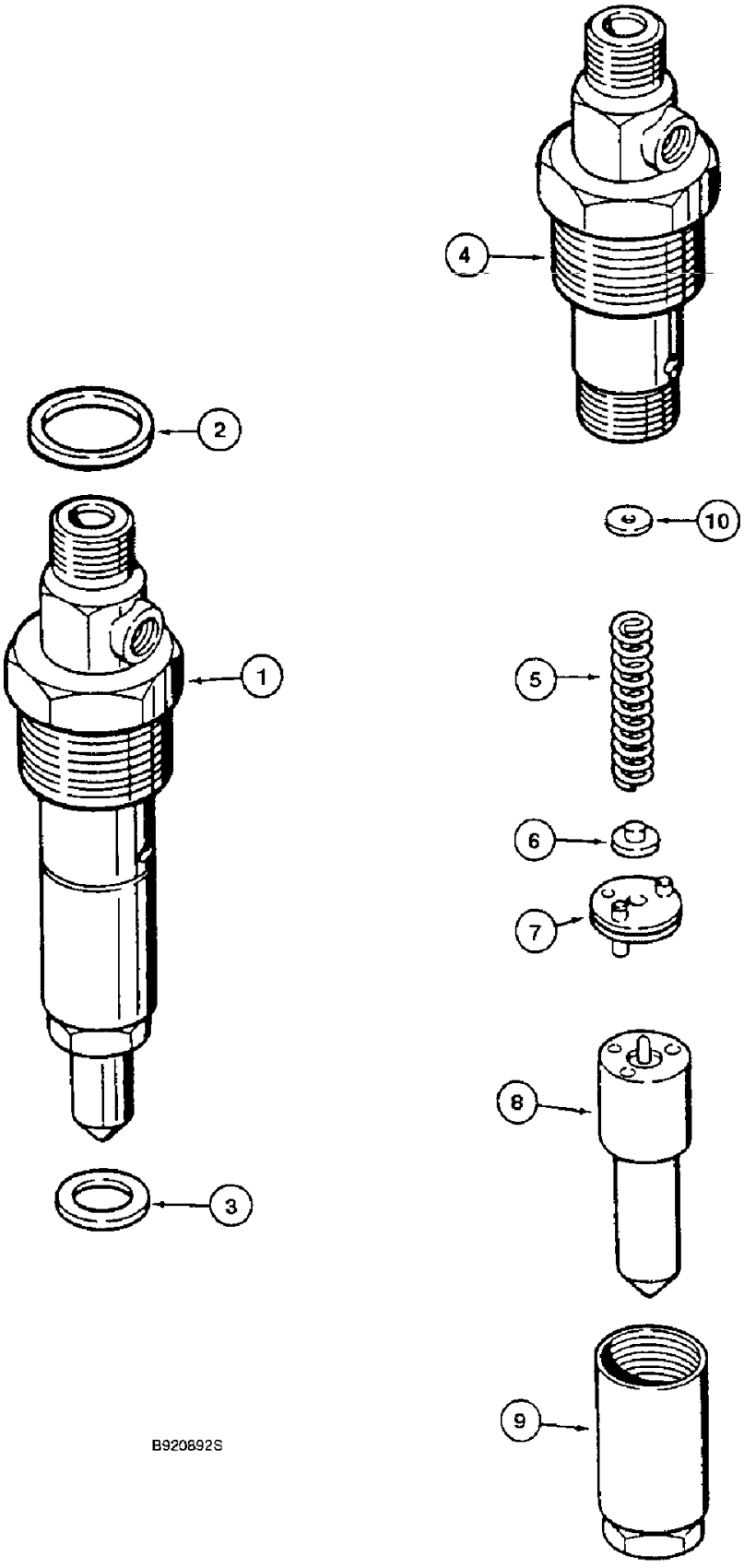
FUEL INJECTION PUMP AND DRIVE, 4-390 ENGINE, 4T-390 ENGINE



FUEL INJECTION PUMP AND DRIVE, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
9		J904637		1	SCREW SCREW - adjusting, low idle
10		131-1144		1	LOCK NUT Jam, #10-24 NUT - self-locking, No. 10 NF
10A		J904781		1	GUIDE GUIDE - spring
11		J904641		1	FITTING FITTING - inlet
12		K962748		1	WASHER WASHER - inlet fitting, copper
13		J904640		1	VENT ORIFICE - bleed
14		J904646		4	BANJO BOLT BOLT - banjo
15		J904644		9	WASHER WASHER - sealing
16		K963867		1	SCREW SCREW - bleed, pump head
17		J904630		1	SOLENOID SOLENOID - shut down, 12 volt
18		J904635		1	O-RING O-RING - solenoid
19		J904777		1	SPRING SPRING - plunger
20		A187990		1	TERMINAL CONNECTOR Male TERMINAL - Male
21		614-5008		1	BOLT Hex, M5 x 8, 8.8, Full Thd BOLT - hex, full threads, 5 x 0.8 x 8 mm
22		K962755		4	ADAPTER FITTING - banjo
23		J902501		3	STUD STUD - pump mounting, 8 - 1.25 x 48 mm
24		J900589		3	NUT NUT - hex flange, special, 8 mm
25		J914389		1	GASKET GASKET - pump mounting
26		J920594		1	PINION GEAR - pump drive
27		J905387		1	BRACE BRACE - fuel pump
28		845-8020		3	BOLT Hex Flg, M8 x 20, 8.8, Full Thd BOLT - heavy hex flange, 8 - 1.25 x 20 mm

FUEL INJECTION NOZZLE, 4-390 ENGINE, 4T-390 ENGINE

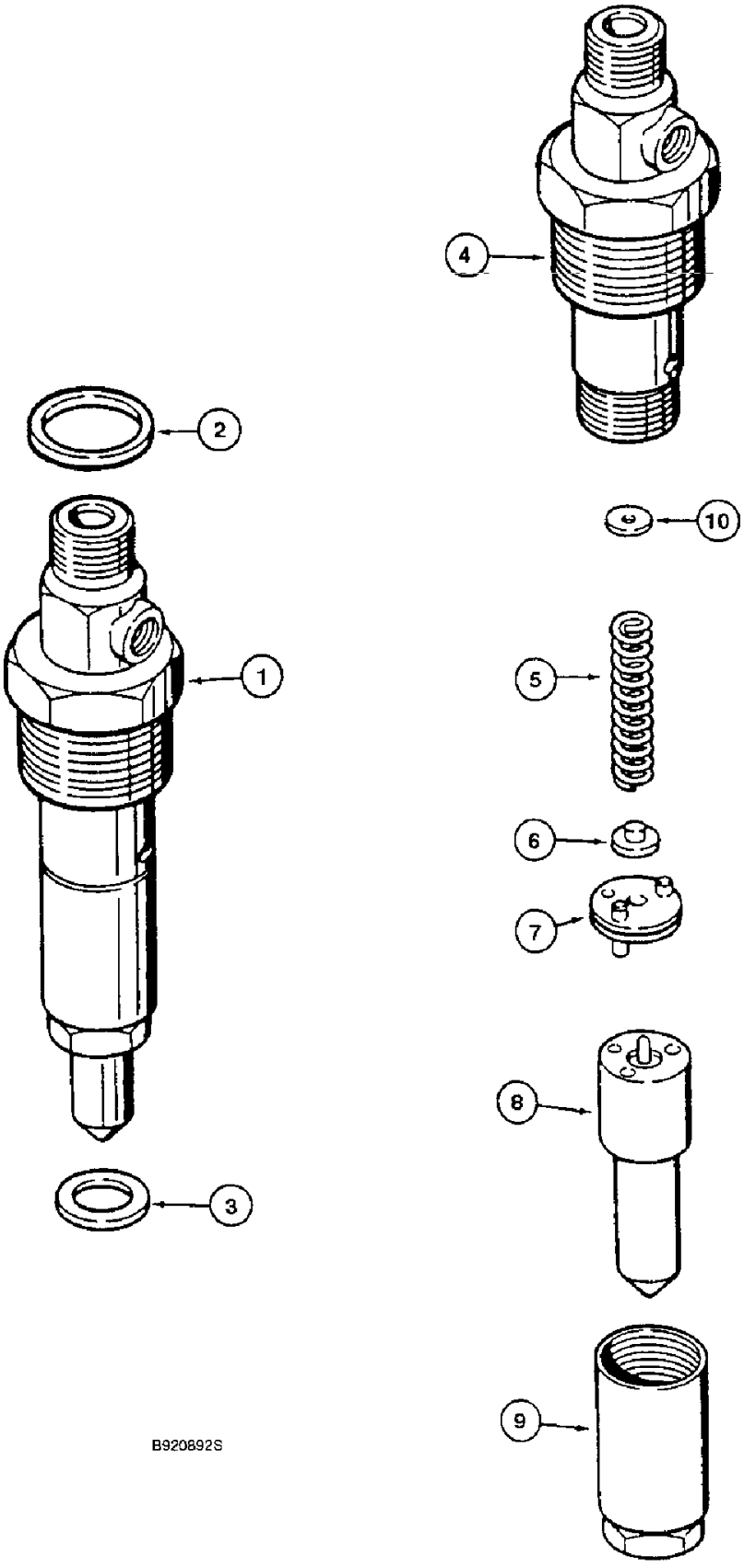


FUEL INJECTION NOZZLE, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		J919331		4	NOZZLE INJECTION NOZZLE ASSEMBLY - fuel injection, new, 7 mm tip (CAV) used on 4T-390 engine, J919300 (Bosch) can be used as an alternate
		JR919331		AR	REMAN-FUEL INJECTOR Remanufactured INJECTION NOZZLE - For N.A. Only
		JC919331		AR	CORE-FUEL INJECTOR Return Number, INJECTION PUMP - For N.A. Only
		J914472		AR	NOZZLE INJECTION NOZZLE ASSEMBLY
		JR914472		AR	REMAN-INJECT NOZZLE REMAN-INJECTION NOZZLE REMANUFACTURED NOZZLE ASSY. - for N.A. Only
		JC914472		AR	CORE-INJECTION PUMP Return Number, NOZZLE ASSY. - for N.A. Only
1		J919336		4	INJECTOR ASSY. NOZZLE ASSEMBLY - fuel injection (Bosch) used on 4-390 engine
1		JR919336		4	REMAN-FUEL INJECTOR Remanufactured INJECTION NOZZLE - N.A. Only
1		JC919336		4	CORE-FUEL INJECTOR Return No, INJECTION NOZZLE - N.A. Only
2		J909356		1	SEAL O-RING - sealing
3	1	J906659		1	SEAL SEAL - injector nozzle, 7 mm injector tip, replaces J920174 seal
4		NSS		1	NOT SERVICED SEPARATELY BODY - injector
5		NSS		1	NOT SERVICED SEPARATELY SPRING - nozzle pressure (CAV injectors)
5		J905152		1	SPRING SPRING - nozzle pressure (Bosch injectors)
6		NSS		1	NOT SERVICED SEPARATELY SEAT - nozzle pressure spring (CAV injectors)
6		J905153		1	SPINDLE SEAT - nozzle pressure spring (Bosch injectors)
7		NSS		1	NOT SERVICED SEPARATELY STOP - nozzle valve (CAV injectors)

(1) Whenever a nozzle is removed from the cylinder head, J906659 seal must be replaced.

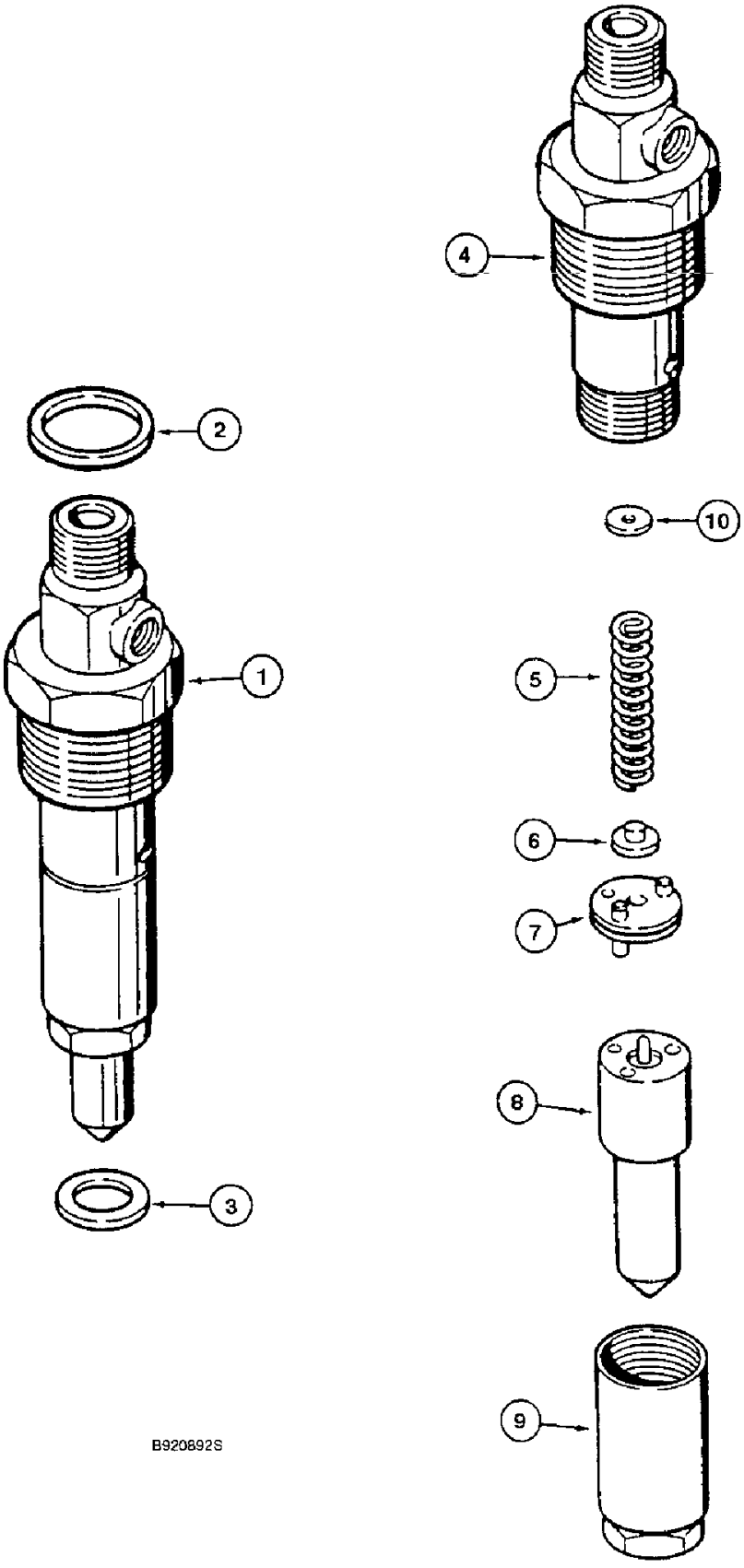
FUEL INJECTION NOZZLE, 4-390 ENGINE, 4T-390 ENGINE



FUEL INJECTION NOZZLE, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
7		J905154		1	PLATE STOP - nozzle valve (Bosch injectors)
8		NSS		1	NOT SERVICED SEPARATELY TIP - nozzle injector
9		NSS		1	NOT SERVICED SEPARATELY NUT - cap, nozzle tip (CAV injectors)
9		A48201		1	NUT NUT - cap, nozzle tip (Bosch injectors)
		A48186		1	KIT KIT - shim, nozzle opening pressure, starter kit, use one shim of the thickness required (used with CAV and Bosch injectors) no longer available, order components separately
10		1806233C1		5	SHIM 1.00mm Thk SHIM, , Nozzle 1.00mm Thk
10		1806234C1		5	SHIM 1.04mm Thk SHIM, , Nozzle 1.04mm Thk
10		1806235C1		5	SHIM 1.08mm Thk SHIM, , Nozzle 1.08mm Thk
10		1806236C1		5	SHIM 1.10mm Thk SHIM, , Nozzle 1.10mm Thk
10		1806237C1		5	SHIM 1.14mm Thk SHIM, , Nozzle 1.14mm Thk
10		1806238C1		5	SHIM 1.18mm Thk SHIM, , Nozzle 1.18mm Thk
10		1806239C1		5	SHIM 1.20mm Thk SHIM, , Nozzle 1.20mm Thk
10		1806240C1		5	SHIM 1.24mm Thk SHIM, , Nozzle 1.24mm Thk
10		1806241C1		5	SHIM 1.28mm Thk SHIM, , Nozzle 1.28mm Thk
10		1806242C1		5	SHIM 1.30mm Thk SHIM, , Nozzle 1.30mm Thk
10		1806243C1		5	SHIM 1.34mm Thk SHIM, , Nozzle 1.34mm Thk
10		1806244C1		5	SHIM 1.38mm Thk SHIM, , Nozzle 1.38mm Thk
10		1806245C1		5	SHIM 1.40mm Thk SHIM, , Nozzle 1.40mm Thk

FUEL INJECTION NOZZLE, 4-390 ENGINE, 4T-390 ENGINE



FUEL INJECTION NOZZLE, 4-390 ENGINE, 4T-390 ENGINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
10		1806246C1		5	SHIM 1.44mm Thk SHIM, , Nozzle 1.44mm Thk
10		1806247C1		5	SHIM 1.48mm Thk SHIM, , Nozzle 1.48mm Thk
10		1806248C1		5	SHIM 1.50mm Thk SHIM, , Nozzle 1.50mm Thk
10		1806249C1		5	SHIM 1.54mm Thk SHIM, , Nozzle 1.54mm Thk
10		1806250C1		5	SHIM 1.58mm Thk SHIM, , Nozzle 1.58mm Thk
10		1806251C1		5	SHIM 1.60mm Thk SHIM, , Nozzle 1.60mm Thk
10		1806252C1		5	SHIM 1.64mm Thk SHIM, , Nozzle 1.64mm Thk
10		1806253C1		5	SHIM 1.68mm Thk SHIM, , Nozzle 1.68mm Thk
10		1806254C1		5	SHIM 1.70mm Thk SHIM, , Nozzle 1.70mm Thk
10		1806255C1		5	SHIM 1.74mm Thk SHIM, , Nozzle 1.74mm Thk
10		1806256C1		5	SHIM 1.78mm Thk SHIM, , Nozzle 1.78mm Thk
10		1806257C1		5	SHIM 1.80mm Thk SHIM, , Nozzle 1.80mm Thk
10		1806258C1		5	SHIM 1.84mm Thk SHIM, , Nozzle 1.84mm Thk
10		1806259C1		5	SHIM 1.88mm Thk SHIM, , Nozzle 1.88mm Thk
10		1806260C1		5	SHIM 1.90mm Thk SHIM, , Nozzle 1.90mm Thk
10		1806261C1		5	SHIM 1.94mm Thk SHIM, , Nozzle 1.94mm Thk
10		1806262C1		5	SHIM 1.98mm Thk SHIM, , Nozzle 1.98mm Thk

SECTION INDEX

Electrical System

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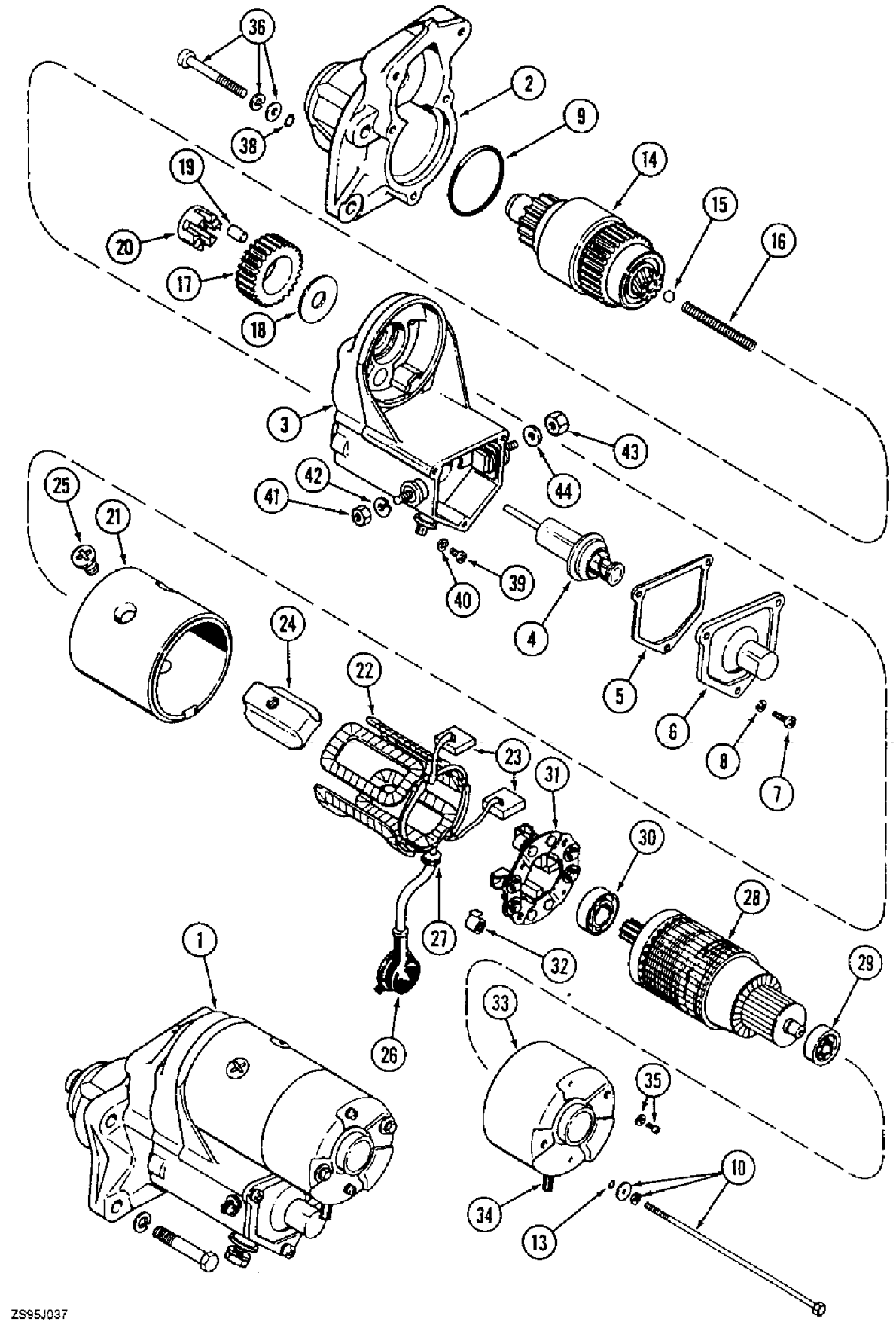
STARTER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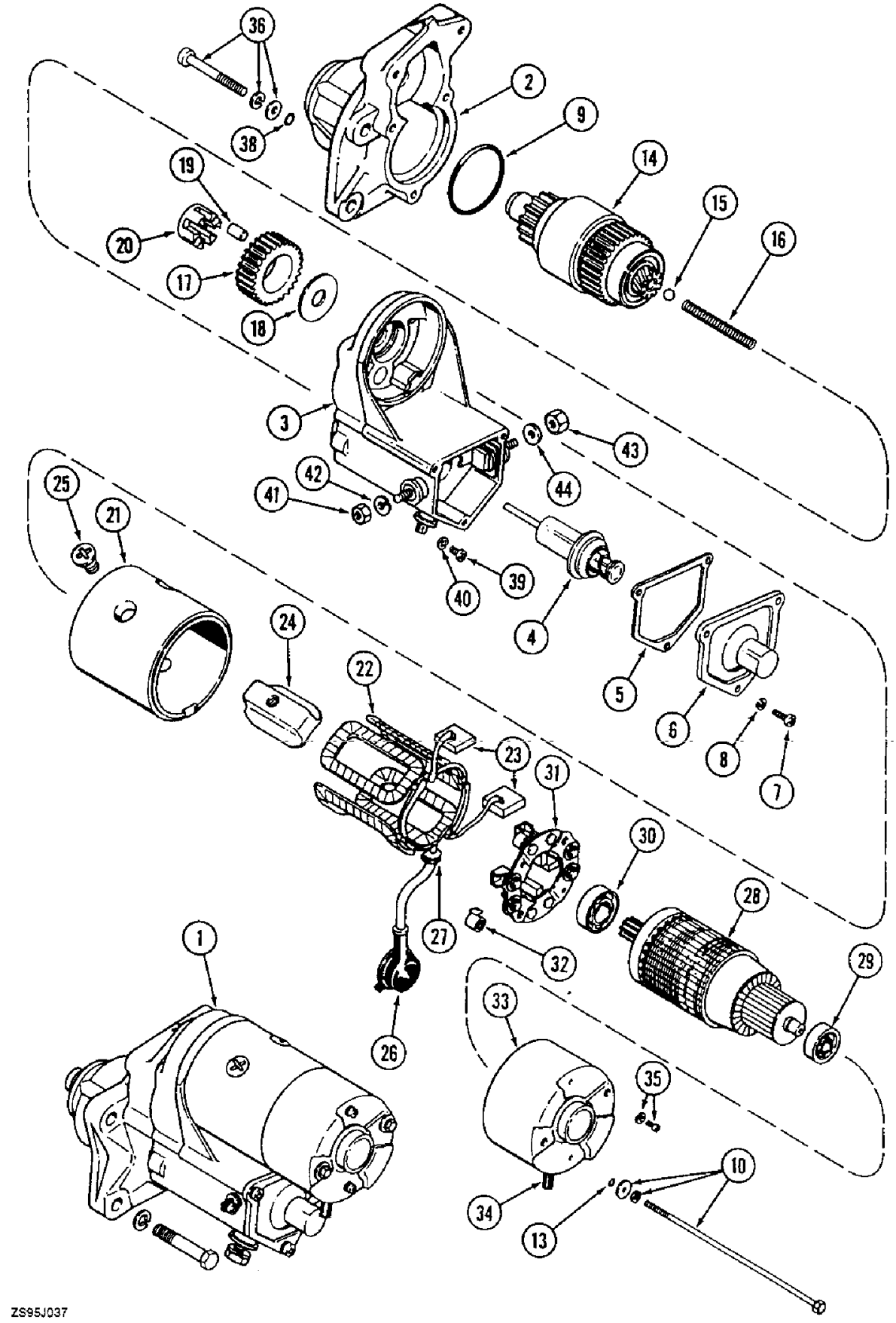
STARTER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		A170746		1	STARTING MOTOR STARTER ASSEMBLY - engine, no longer used, order 1987559C1 starter, see parts list on figure 4-6.
		86982709R		AR	REMAN-STARTER REMANUFACTURED STARTING MOTOR - for N.A. Only
		86982709C		AR	CORE-STARTER Return Number, STARTING MOTOR - for N.A. Only
		AR170746		1	STARTING MOTOR STARTER ASSEMBLY - engine, remanufactured (North America), no longer available, order 1987559C1, see parts list on figure 4-6.
1		104452A2R		1	REMAN-STARTER Remanufactured STARTER 12 volt, 2.5KW - For N.A. Only
1		104452A1C		1	CORE-STARTER Return Number, STARTER 12 volt, 2.5KW - For N.A. Only to TIED TO SUB: A170746
2		A46948		1	HOUSING HOUSING - drive end
3		A46949		1	IGNITION SWITCH SWITCH ASSEMBLY - magnetic
4		NSS		1	NOT SERVICED SEPARATELY SOLENOID
5		NSS		1	NOT SERVICED SEPARATELY GASKET - solenoid cover
6		NSS		1	NOT SERVICED SEPARATELY COVER - solenoid
7		NSS		3	NOT SERVICED SEPARATELY SCREW -
8		NSS		3	NOT SERVICED SEPARATELY WASHER - cover screw
9		1546500C1		1	SEAL O-RING -
10		A47243		2	BOLT BOLT ASSEMBLY - tie, starter (includes washers)
13		A47127		1	O-RING O-RING - bolt seal
14		A52396		1	DRIVE CLUTCH - drive
15		211-209		1	BALL BALL - chrome alloy steel, 11/32 inch, grade 24
16		A47232		1	SPRING SPRING - compression, 2-13/16 inch free length
17		A47233		1	GEAR PINION - idler

STARTER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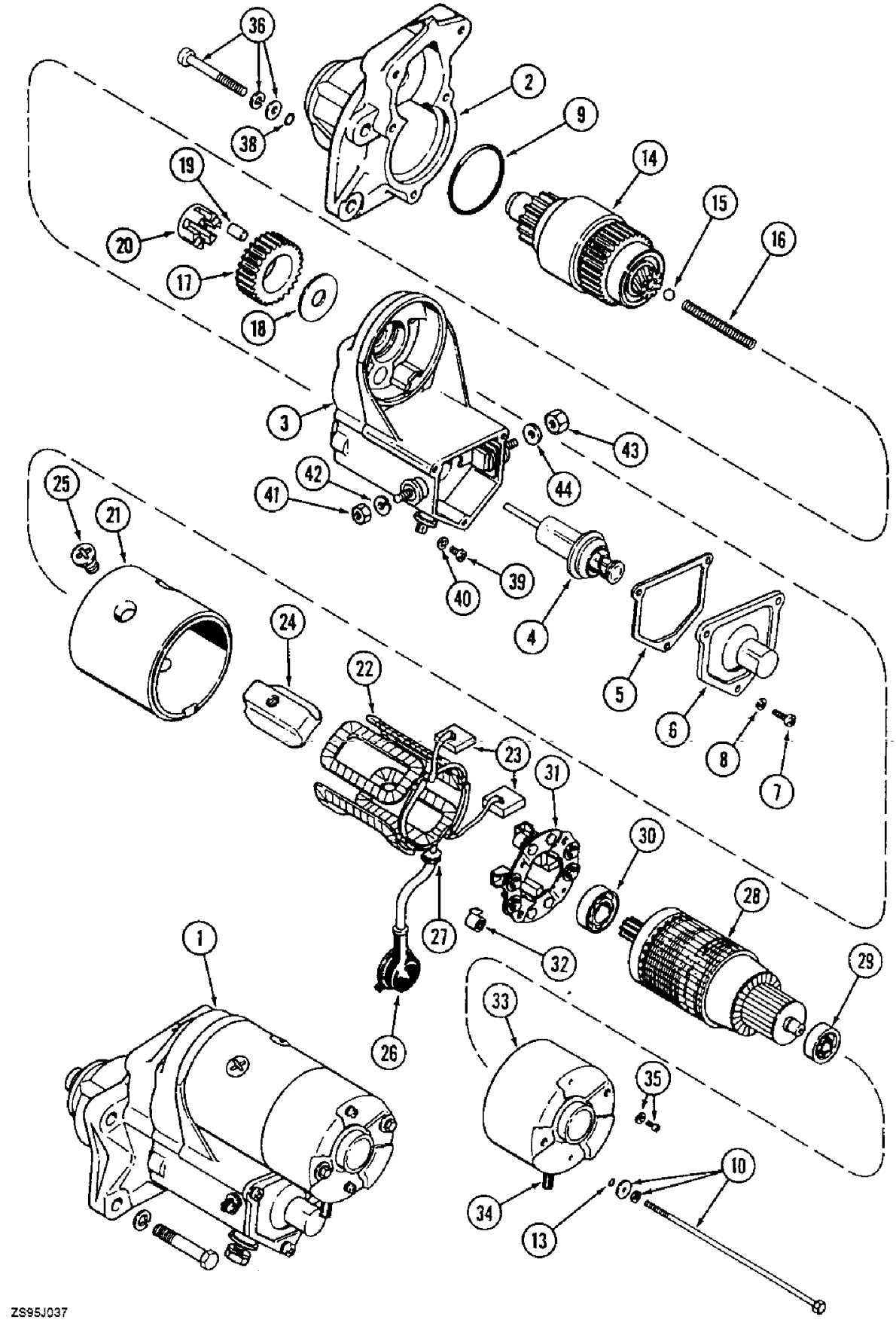
STARTER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
18		A47234		1	WASHER WASHER - thrust, idler pinion
19		A47235		6	ROLLER BEARING ROLLER - pinion bearing
20		A47236		1	RETAINER RETAINER - roller bearing
		A47240		1	HOUSING HOUSING ASSEMBLY - with coil and brushes
21		NSS		1	NOT SERVICED SEPARATELY HOUSING - starter
22		NSS		1	NOT SERVICED SEPARATELY COIL - field
23		NSS		2	NOT SERVICED SEPARATELY BRUSHES - starter
24		NSS		4	NOT SERVICED SEPARATELY SHOE - pole
25		NSS		4	NOT SERVICED SEPARATELY SCREW - pole shoes
26		NSS		1	NOT SERVICED SEPARATELY BOOT - magnetic switch terminal
28		A47242		1	ARMATURE ARMATURE ASSEMBLY - starter
27		A47241		1	PLATE PLATE - lock
29		452698C1		1	BALL BEARING 10 mm ID x 30 mm OD x 9 mm BEARING, BALL - Commutator end
30		A47247		1	BALL BEARING 17 mm ID x 35 mm OD x 10 mm BEARING - drive end
31		A47239		1	HOLDER HOLDER ASSEMBLY - brush (Includes 2 brushes)
32		A47249		4	SPRING SPRING - brush tension
33		A47237		1	FRAME FRAME - commutator end
34		A47238		1	COVER COVER - end frame
35		A47244		2	CAPTIVE WASHER SCREW SCREW ASSEMBLY - with washer, brush
36		A47230		3	BOLT BOLT ASSEMBLY - commutator end cover to drive end housing
38		A47130		1	O-RING O-RING - bolt seal
39		440-1086		1	SCREW Cross Pan Hd, #8-32 x 3/8" SCREW - machine, pan Phillips, No. 8 NC x 3/8"
40		493-21017		1	LOCK WASHER Int Tooth, #8 WASHER - internal tooth lock, No. 8

STARTER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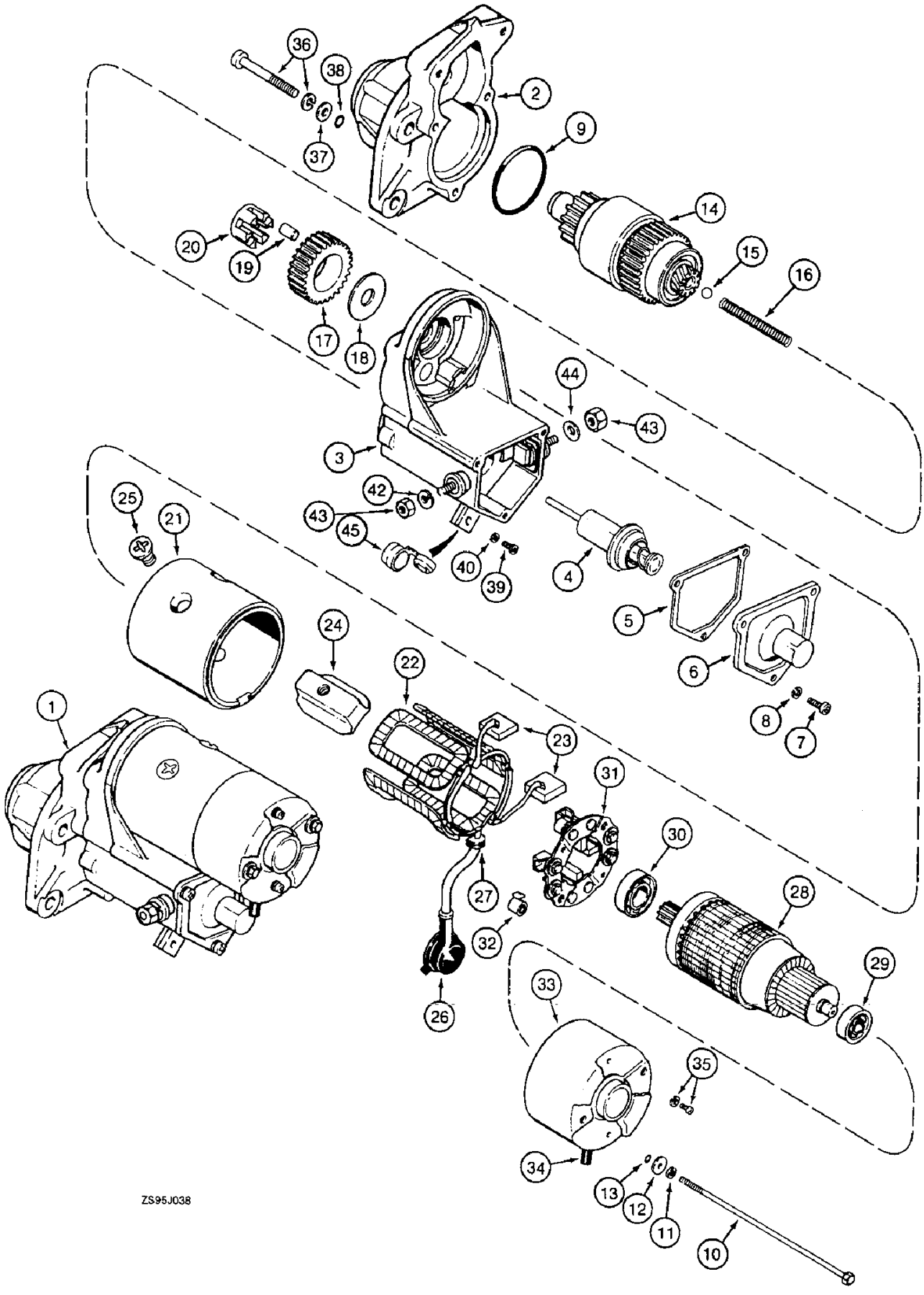
STARTER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
41		425-146		1	JAM NUT Jam, 3/8"-16, G5 NUT - hex, jam, 3/8 inch NC, hex
42		492-11038		1	LOCK WASHER 3/8" LOCK WASHER, 3/8"
43		825-1410		1	NUT M10, Cl 8 Nut, M10, Cl 8
44		A10454		1	WAVE WASHER WASHER - spring

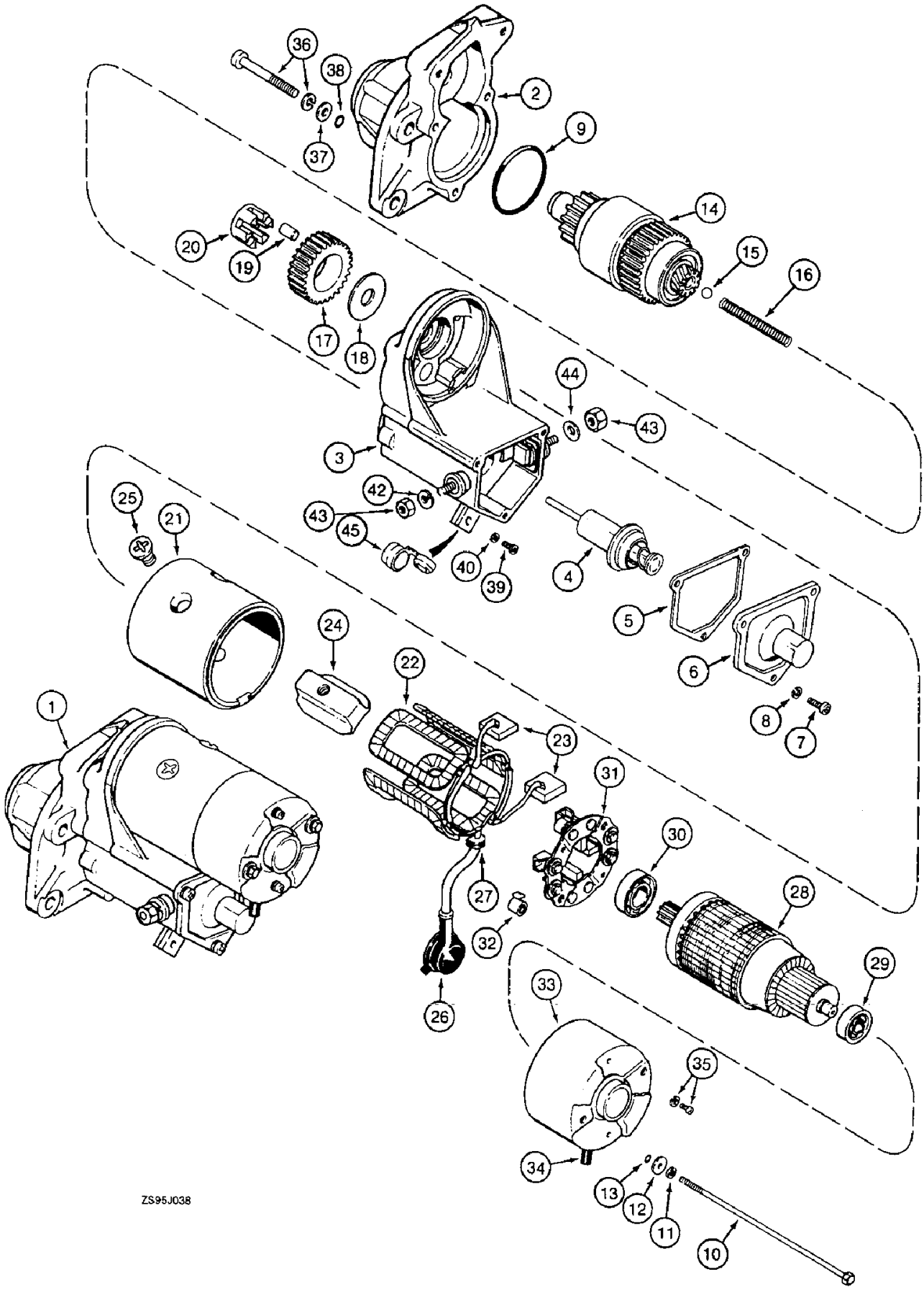
STARTER



STARTER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		1987559C1		1	STARTING MOTOR STARTER ASSEMBLY - engine, new
2		A46948		1	HOUSING - drive end
3		104588A1		1	SOLENOID SWITCH ASSEMBLY - magnetic, includes items 4-8
4		NSS		1	NOT SERVICED SEPARATELY SOLENOID - switch
5		NSS		1	NOT SERVICED SEPARATELY GASKET - solenoid cover
6		NSS		1	NOT SERVICED SEPARATELY COVER - solenoid
7		NSS		3	NOT SERVICED SEPARATELY SCREW -
8		NSS		3	NOT SERVICED SEPARATELY WASHER - cover screw
9		1546500C1		1	SEAL O-RING -
		A47243		2	BOLT ASSEMBLY - tie, starter
10		A47128		1	BOLT - through
11		892-11006		1	LOCK WASHER M6 WASHER, LOCK, M6
12		195-516		1	WASHER #12 - flat, 1/4 x 9/16 x 1/16 inch
13		A47127		1	O-RING - bolt seal
14		104587A1		1	CLUTCH - drive
15		211-1311		1	BALL 11/32" Dia - chrome alloy steel, 11/32", grade 200
16		A47232		1	SPRING - compression, 2-13/16 inch free length
17		A47233		1	GEAR PINION - idler
18		A47234		1	WASHER - thrust, idler pinion
19		A47235		6	ROLLER BEARING ROLLER - pinion bearing
20		A47236		1	RETAINER - roller bearing
		A47240		1	HOUSING ASSEMBLY - with coil and brushes
21		NSS		1	NOT SERVICED SEPARATELY HOUSING - starter
22		NSS		1	NOT SERVICED SEPARATELY COIL - field
23		NSS		2	NOT SERVICED SEPARATELY BRUSHES - starter

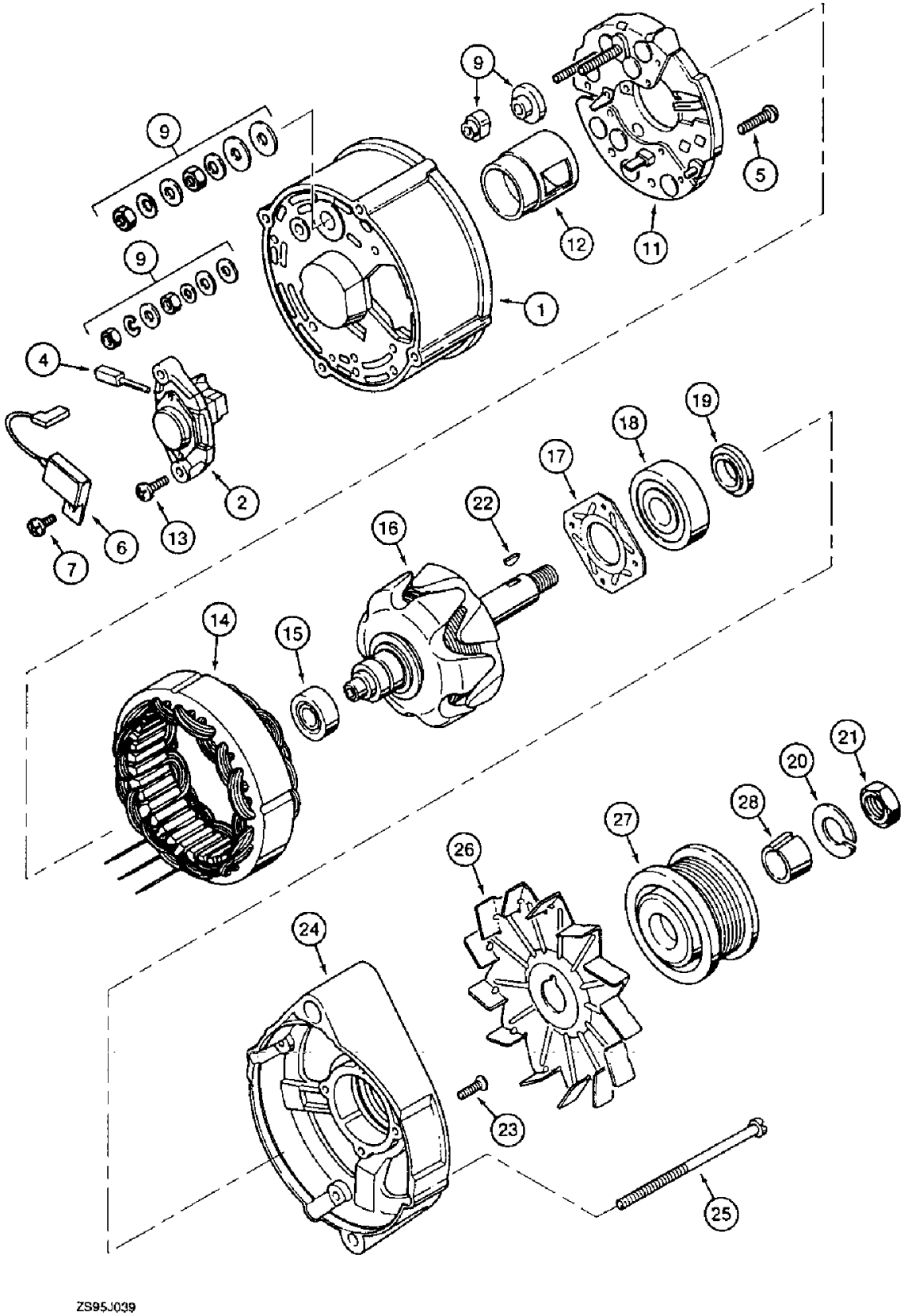
STARTER



STARTER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
24		NSS		4	NOT SERVICED SEPARATELY SHOE - pole
25		NSS		4	NOT SERVICED SEPARATELY SCREW - pole shoes
26		NSS		1	NOT SERVICED SEPARATELY BOOT - magnetic switch terminal
27		A47241		1	PLATE - lock
28		A47242		1	ARMATURE ASSEMBLY - starter
29		452698C1		1	BALL BEARING 10 mm ID x 30 mm OD x 9 mm BEARING, BALL - Commutator end
30		A47247		1	BALL BEARING 17 mm ID x 35 mm OD x 10 mm BEARING - drive end
31		A47239		1	HOLDER ASSEMBLY - brush (Includes 2 brushes)
32		A47249		4	SPRING - brush tension
33		A47237		1	FRAME - commutator end
34		A47238		1	COVER - end frame
35		A47244		2	CAPTIVE WASHER SCREW SCREW ASSEMBLY - with washer, brush
		A47230		3	BOLT ASSEMBLY - commutator end cover to drive end housing
36		A47129		1	CAPTIVE WASHER SCREW BOLT - with washer
37		195-2015		1	WASHER - flat, 1/4 x 1-3/4 x 1/16 inch
38		A47130		1	O-RING - bolt seal
39		A46950		1	SCREW - machine, pan Phillips, 5 x 8 mm
40		892-11005		1	LOCK WASHER M5 WASHER, LOCK, M5
42		892-11010		1	LOCK WASHER M10
43		825-1410		2	NUT M10, Cl 8 Field coil terminal M10, Cl 8
44		A10454		1	WAVE WASHER - spring
45		104589A1		1	BUSHING - insulation
27		A47241		1	PLATE - lock

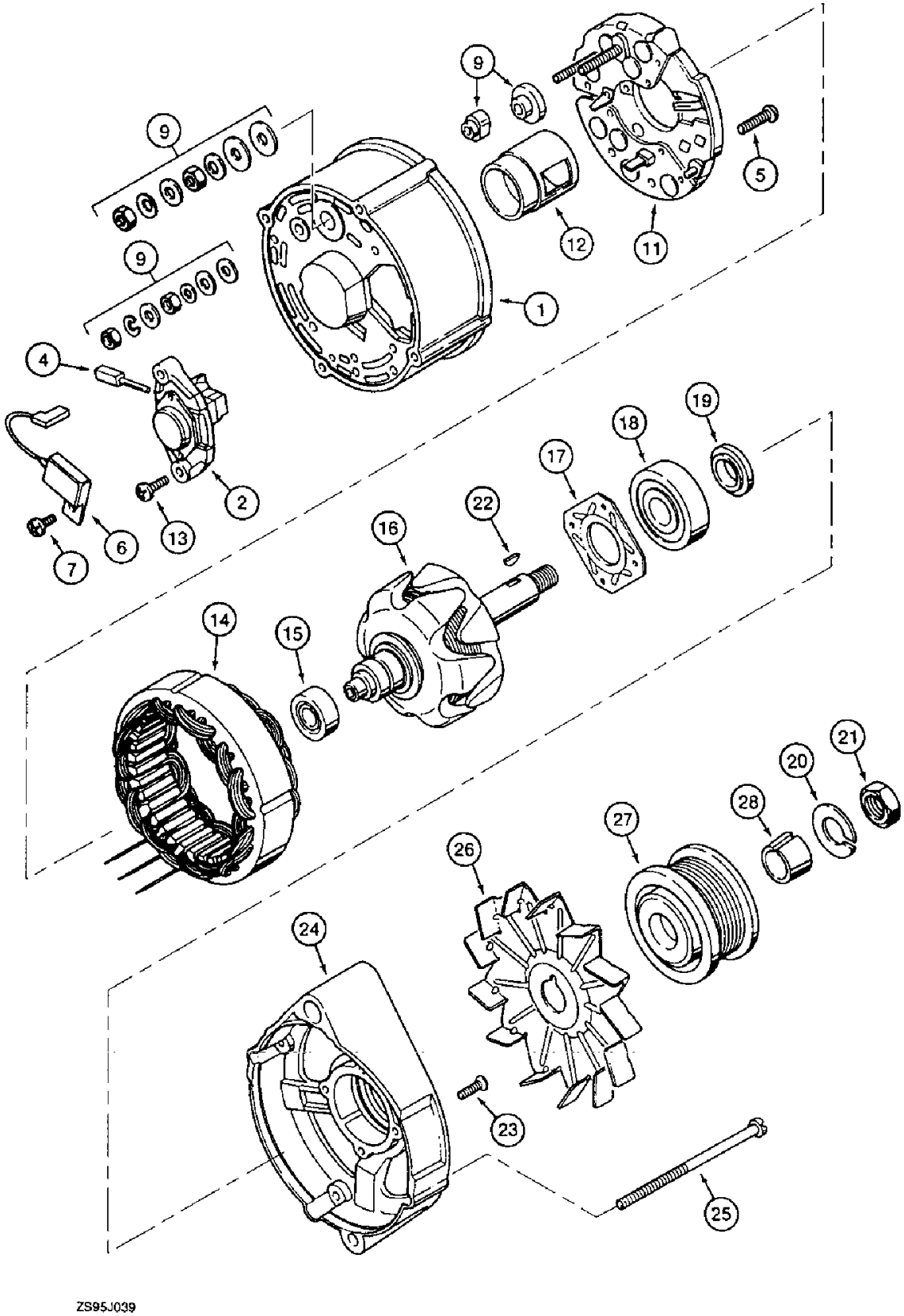
A187873 ALTERNATOR - 65 AMPERE



A187873 ALTERNATOR - 65 AMPERE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		A187873		1	ALTERNATOR ALTERNATOR ASSEMBLY - engine, 14volt, 65 ampere
		AR187873		1	REMAN-ALTERNATOR For N.A. only
		AC187873		1	CORE-ALTERNATOR Return number - For N.A. only
1		A187903		1	COVER HOUSING - collector ring end
2		A187906		1	VOLTAGE REGULATOR REGULATOR - voltage
4		1964968C1		1	COMMUTATOR BRUSH BRUSH - alternator
5		1530431C1		2	BOLT BOLT - with washer
6		3079134R1		1	CAPACITOR CAPACITOR - alternator
7		1964969C1		1	SCREW SCREW - special
9		A187904		1	ALTERNATOR REPAIR KIT SET - hardware, terminal
11		A187917		1	RECTIFIER RECTIFIER - alternator
12		A187899		1	INNER SHIELD SHIELD - alternator
13		A187504		2	SCREW BOLT - with washer, with washer, voltage regulator retaining
14		1964966C1		1	STATOR STATOR - alternator
15		A186186		1	BALL BEARING 12 mm ID x 32 mm OD x 10 mm BEARING - ball, rotor, collector ring end
16		1964964C1		1	ROTOR ROTOR - alternator
17		A187901		1	FIXING PLATE PLATE - bearing retaining, drive end cover
18		A186183		1	BALL BEARING 17 mm ID x 47 mm OD x 14 mm BEARING - ball, rotor, drive end
		3078897R1		1	SET OF PARTS KIT - rotor retaining
19		NSS		1	NOT SERVICED SEPARATELY RING - spacer
20		NSS		1	NOT SERVICED SEPARATELY WASHER - rotor shaft
21		NSS		1	NOT SERVICED SEPARATELY NUT - rotor shaft
22		NSS		1	NOT SERVICED SEPARATELY KEY - pulley retainer, not used in A187873 alternator

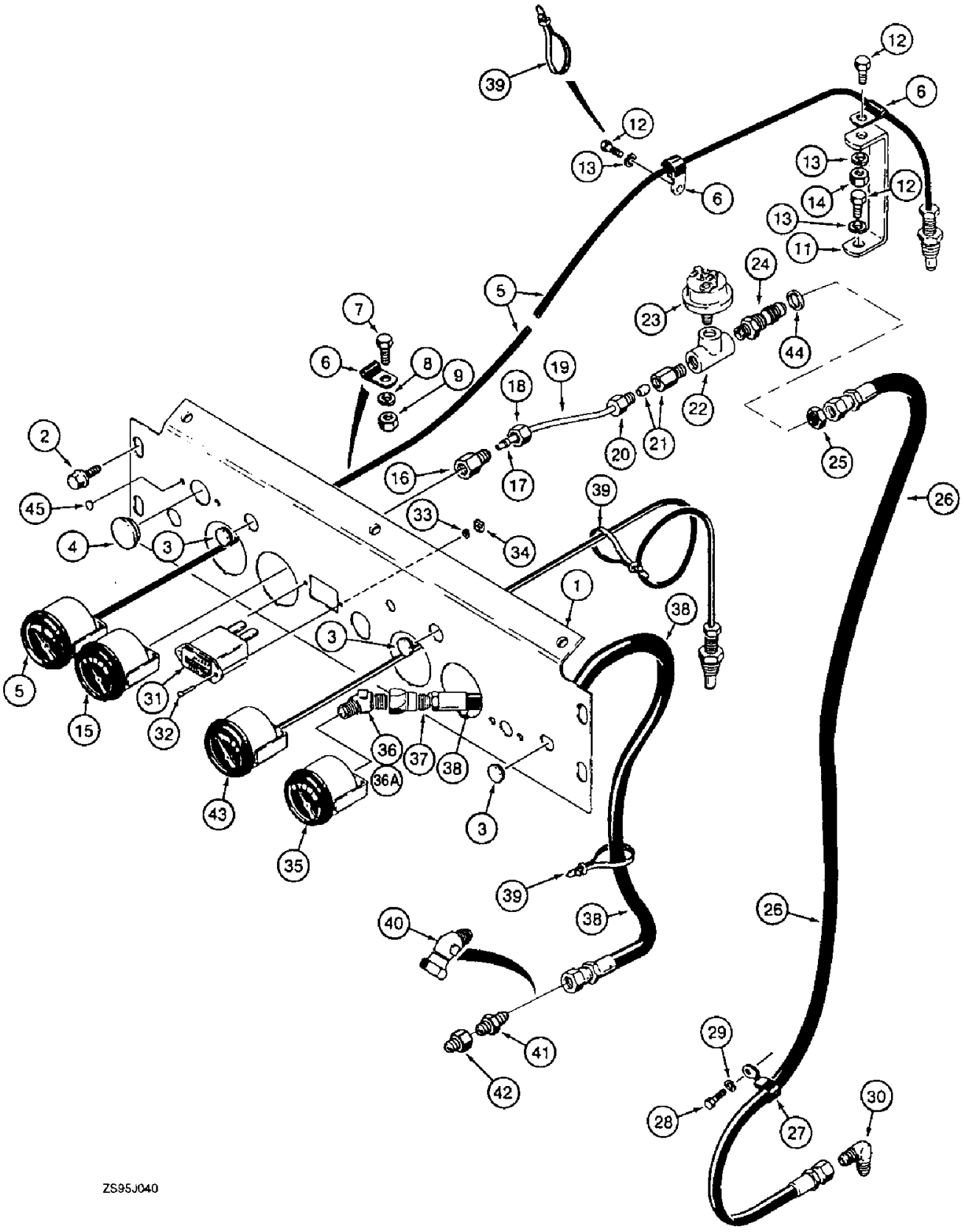
A187873 ALTERNATOR - 65 AMPERE



A187873 ALTERNATOR - 65 AMPERE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
23		NSS		4	NOT SERVICED SEPARATELY SCREW - bearing retaining plate
24		A186182		1	HOUSING HOUSING - drive end, service with A187994
25		A186193		4	BOLT BOLT - slotted, special
26		221425R1		1	FAN FAN - alternator, not included with alternator assembly, order separately
27		J908560		1	PULLEY PULLEY - drive, not included with alternator assembly, order separately
28		J908563		1	RETAINER RETAINER - pulley, not included with alternator assembly, order separately

INSTRUMENT PANEL AND GAUGES



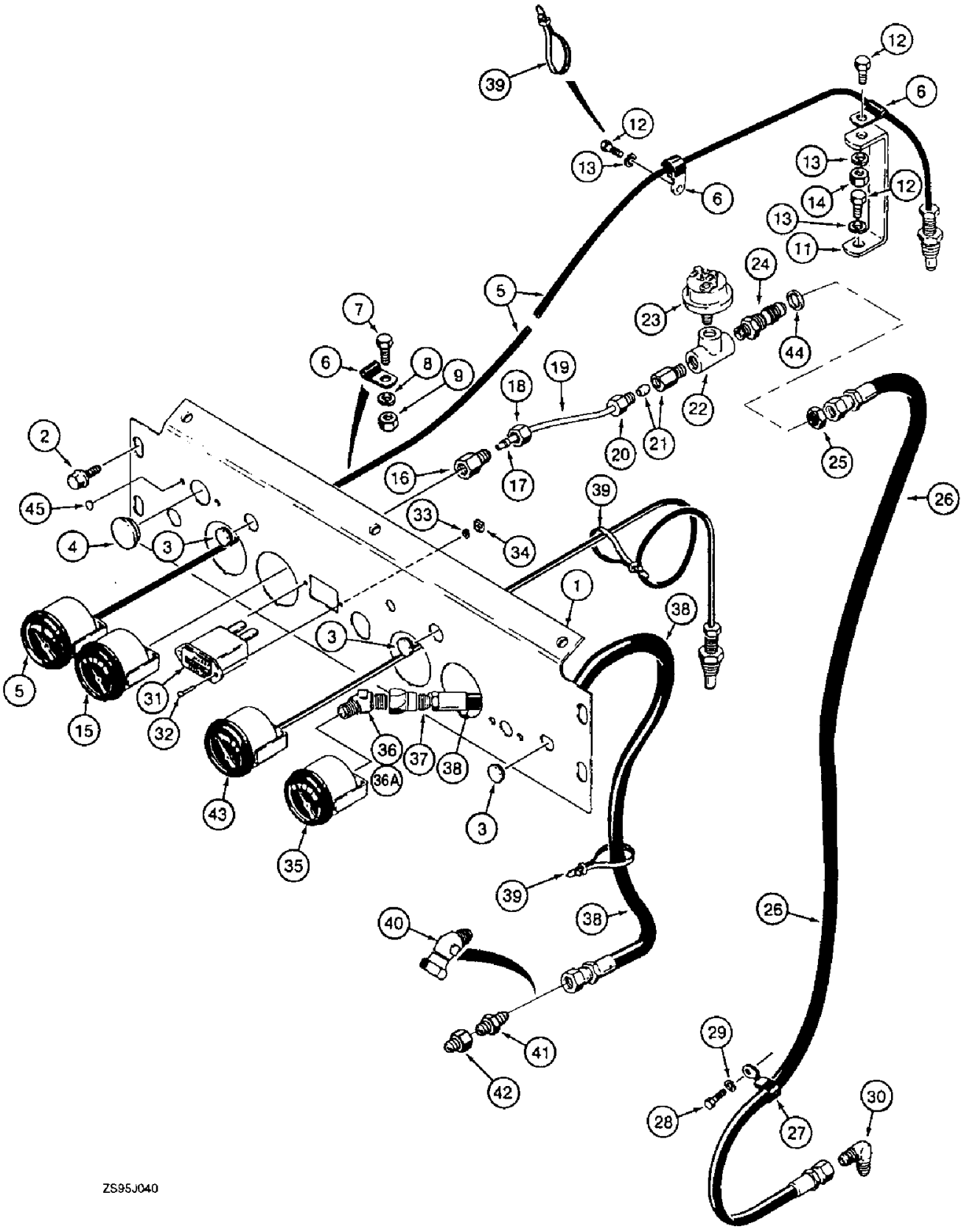
INSTRUMENT PANEL AND GAUGES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58269		1	PANEL, INSTRUMENTS PANEL - instrument, includes decal, for decals see figure 9-38
2		160-101		4	BOLT Hex Flg, 3/8"-16 x 3/4", G8, Full Thd - hex flange, 3/8 NC x 3/4 inch, grade 8
3		353-407		3	PLUG Dome, .687" hole, Nylon - button, 11/16 inch
4		353-411		1	PLUG Dome, 1.000" hole, Nylon
5		{R52133}		1	- engine temperature
6		515-2348		1-3	CLAMP 3/16", Insul, 3/8" Bolt - P-type, 3/16 inch ID
7		413-616		1	BOLT Hex, 3/8"-16 x 1", G5, Full Thd - hex, 3/8 NC x 1 inch
8		492-11038		1	LOCK WASHER 3/8"
9		425-106		1	NUT 3/8"-16, G5
11		R50427		1	BRACKET - mounts to front of engine (if used)
12		613-10020		3	BOLT Hex, M10 x 20, 8.8, Full Thd - hex, full threads, 10 - 1.5 x 20 mm (if used)
13		892-11010		3	LOCK WASHER M10 (If used) M10
14		825-1410		1	NUT M10, Cl 8 If used M10, Cl 8
15		R49132		1	GAUGE ASSY. GAUGE - engine oil pressure
		D35091		1	PIPE FITTING ADAPTER ASSEMBLY - straight, compression
16		NSS		1	NOT SERVICED SEPARATELY BODY - adapter
17		D37176		1	SLEEVE - compression
18		D37362		1	TUBE NUT - compression
19	1	A152199		1	PIPE TUBE - nylon, 20 inch (508 mm) long, cut from A138483 bulk tube, see below
		222-400		1	HYD CONNECTOR 1/8" NPT x 5/16"-24 ADAPTER - compression, 1/8 tube OD x 1/8 inch PT

(1) For the instrument panel hinged lockup cover, see figure 9-16

NOTE: For the instrument panel hinged lockup cover, see figure 9-16.

INSTRUMENT PANEL AND GAUGES

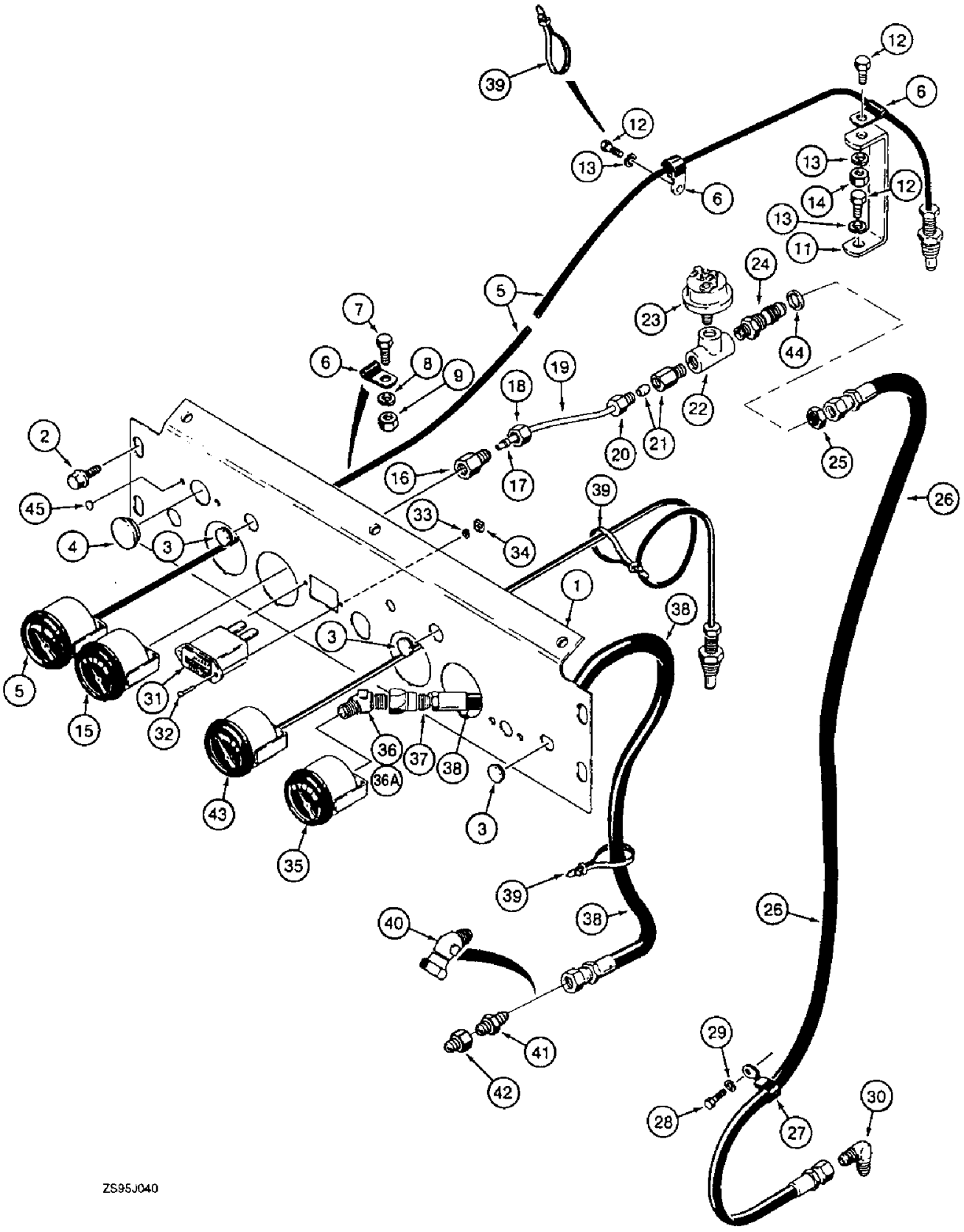


INSTRUMENT PANEL AND GAUGES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
20		NSS		1	NOT SERVICED SEPARATELY BODY - adapter
21		222-500		1	TUBE NUT 5/16"-24 NUT - hex, 1/8 tube OD x 5/16-24 inch, includes sleeve
22		217-1160		1	TEE 1/8"-27 Female - pipe, 1/8 inch female
23		D28796		1	SWITCH - see figure 4-14 for connections
24		R58667		1	FITTING ADAPTER - bulkhead
25		425-157		1	JAM NUT Jam, 7/16"-20, G5
26		D95116		1	HOSE - 57 inch (1448 mm) long, engine oil pressure
27		R40419		1	CLAMP - special, twist type, engine oil pressure hose (if used)
28		613-12025		1	BOLT Hex, M12 x 25, 8.8, Full Thd (If used) Hex, M12 x 25, 8.8, Full Thd
29		80679		1	LOCK WASHER 1/2" WASHER, LOCK, , If used 1/2"
30		218-481		1	ELBOW 90º, 7/16"-20, 37º x 1/8"-27, NPTF - 90 degree, 7/16-20 flare x 1/8 inch PT
31		L107631		1	METER HOURMETER - engine
32		169-169		2	SCREW Sltd Fil Hd, #5-40 x 1/2" - machine, Fillister head, No. 5 NC x 1/2 inch
33		492-11005		2	LOCK WASHER #5 Washer, Lock, #5
34		224-10005		2	SQUARE NUT Sq, #5-40 - square, No. 5 NC
35		138860A1		1	GAUGE - transmission oil pressure
36		218-531		1	ELBOW 45º, 7/16-20" 37º x 1/8"-27, NPTF - 45 degree, 7/16-20 flare x 1/8 inch PT
36A		218-461		1	HYD CONNECTOR 7/16"-20, 37º x 1/8"-27, Fem Pipe ADAPTER - straight, 7/16-20 flare x 1/8 inch PT
37		221-1335		1	COUPLING Pipe, 1/8" NPT
38		R58666		1	HOSE ASSY. HOSE - 30 inch (762 mm) long, transmission oil pressure

NOTE: For the instrument panel hinged lockup cover, see figure 9-16.

INSTRUMENT PANEL AND GAUGES



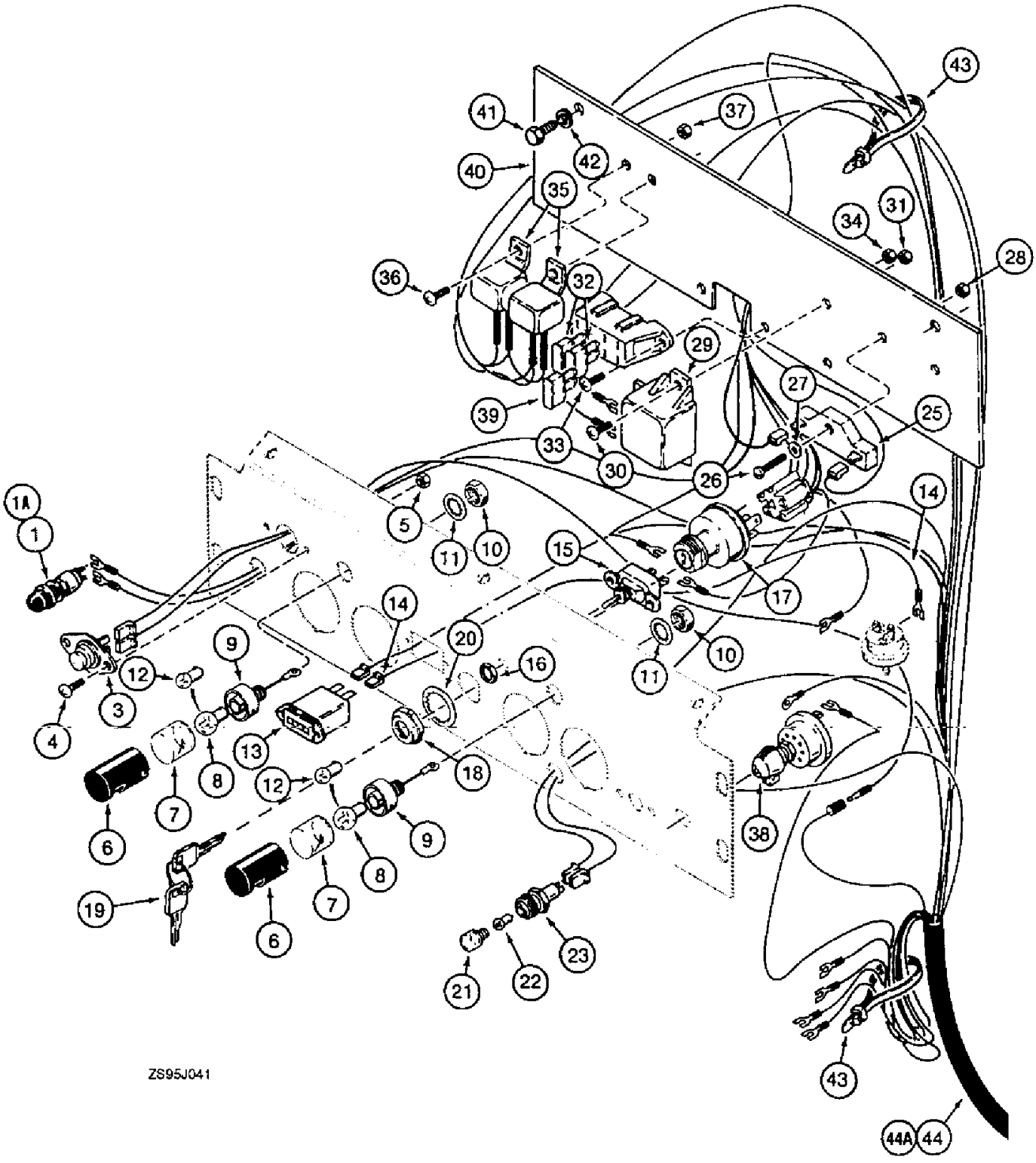
INSTRUMENT PANEL AND GAUGES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
39		L18337		UAR	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon
40		218-5172		1	ELBOW 45º, 9/16"-18, 37º x 9/16"-18, 37º Fem Sw - 45 degree, 9/16-18 inch flare x swivel
41		D36264		1	FITTING ADAPTER - air restriction indicator, special
42		221-87		1	REDUCER Hex, 1/2" x 1/8" NPT - pipe, 1/2 male x 1/8 inch female
43		R54146		1	GAUGE - torque converter temperature, includes tube and connector, includes tube and connector
44		493-21052		1	LOCK WASHER Int Tooth, 1/2" WASHER - internal tooth lock, 1/2 inch
45		353-400		2	PLUG Dome, .250" hole, Nylon
	1	A138483		UAR	TUBE - nylon, 99 inch (2515 mm) long

(1) For the instrument panel hinged lockup cover, see figure 9-16

NOTE: For the instrument panel hinged lockup cover, see figure 9-16.

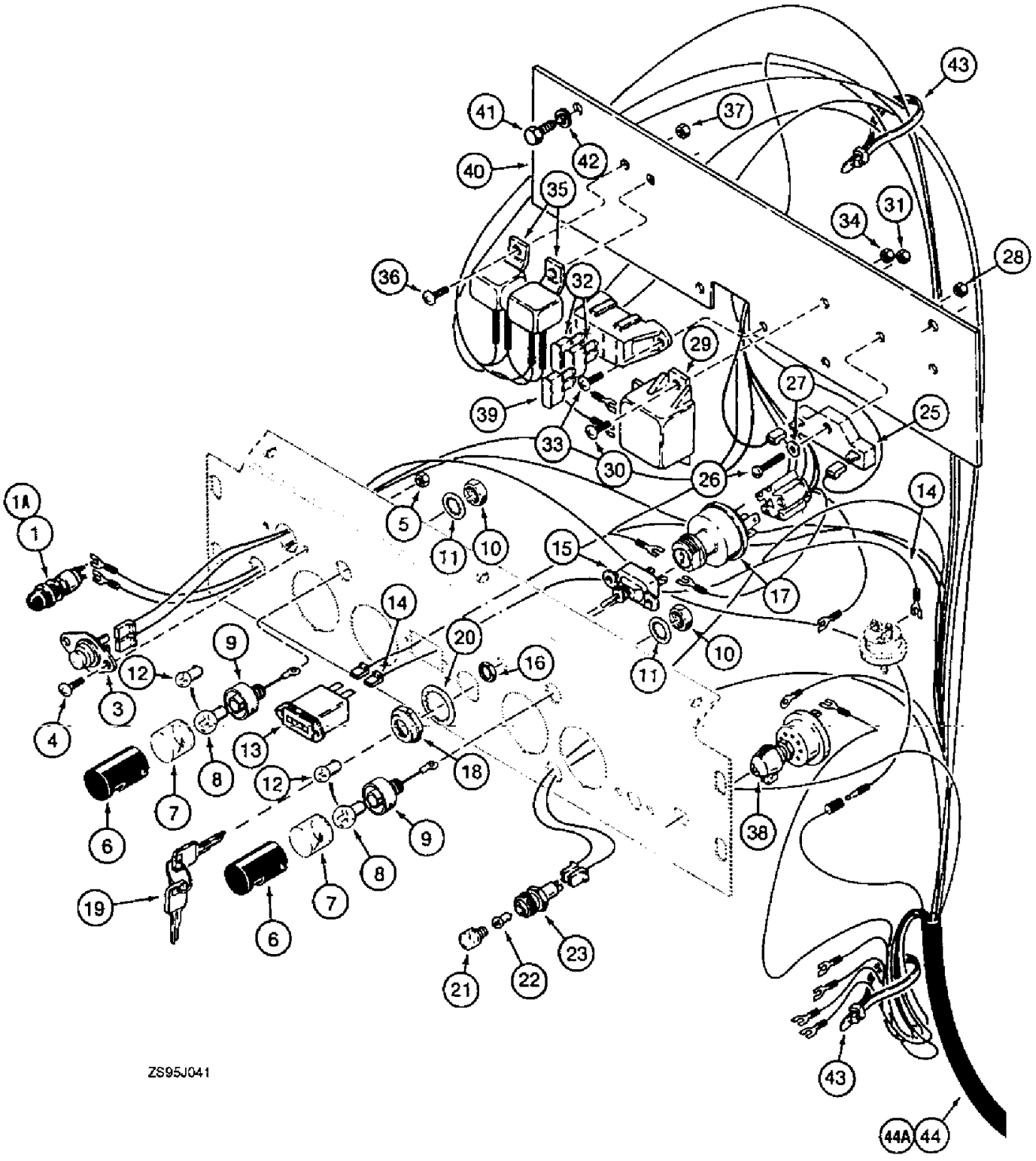
INSTRUMENT PANEL WIRING



INSTRUMENT PANEL WIRING

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		121815C91		1	LAMP ASSEMBLY - alternator indicator
1A		200557H1		1	BULB C2V, #1815, 14V - lamp, No. 1815
3		D67872		1	SWITCH - push button, cold start
4		140-105		2	SCREW Cross Pan Hd, #10-24 x 1/2"
5		86625057		2	NUT #10-24, GB NUT, LOCK, #10-24, GB
		D35815		2	LAMP ASSEMBLY - instrument panel, if used
6		D37918		1	COVER - lamp
7		D37919		1	LENS - lamp
8		R19897		1	BULB - No. 623
9		NSS		1	NOT SERVICED SEPARATELY BODY - lamp, includes wire
10		D39095		1	NUT - special
11		493-21065		2	LOCK WASHER Int Tooth, 5/8" WASHER - internal tooth lock, 5/8 inch
12		71421		2	BULB - lamp, No. 67
13		L107631		1	METER HOURMETER - engine
14		R27252		1	HARNESS WIRE - to pressure switch
15		R50405		1	SWITCH - toggle, fuel shutoff, if used
16		N13588		1	NUT - special
		D134737		1	IGNITION SWITCH SWITCH ASSEMBLY - ignition
17		NSS		1	NOT SERVICED SEPARATELY SWITCH - ignition
18		101760A1		1	NUT - ignition switch
19		A77313		1	SET OF 2 KEYS KEY - set of two; metal without padding
20		493-21104		1	LOCK WASHER Int Tooth, 1" WASHER - internal tooth lock, 1 inch
		109369C91		1	LIGHT ASSY. LAMP ASSEMBLY - indicator
21		71652C1		1	LENS - lamp
22		200557H1		1	BULB C2V, #1815, 14V - lamp, No. 1815
23		NSS		1	NOT SERVICED SEPARATELY BODY - lamp

INSTRUMENT PANEL WIRING



INSTRUMENT PANEL WIRING

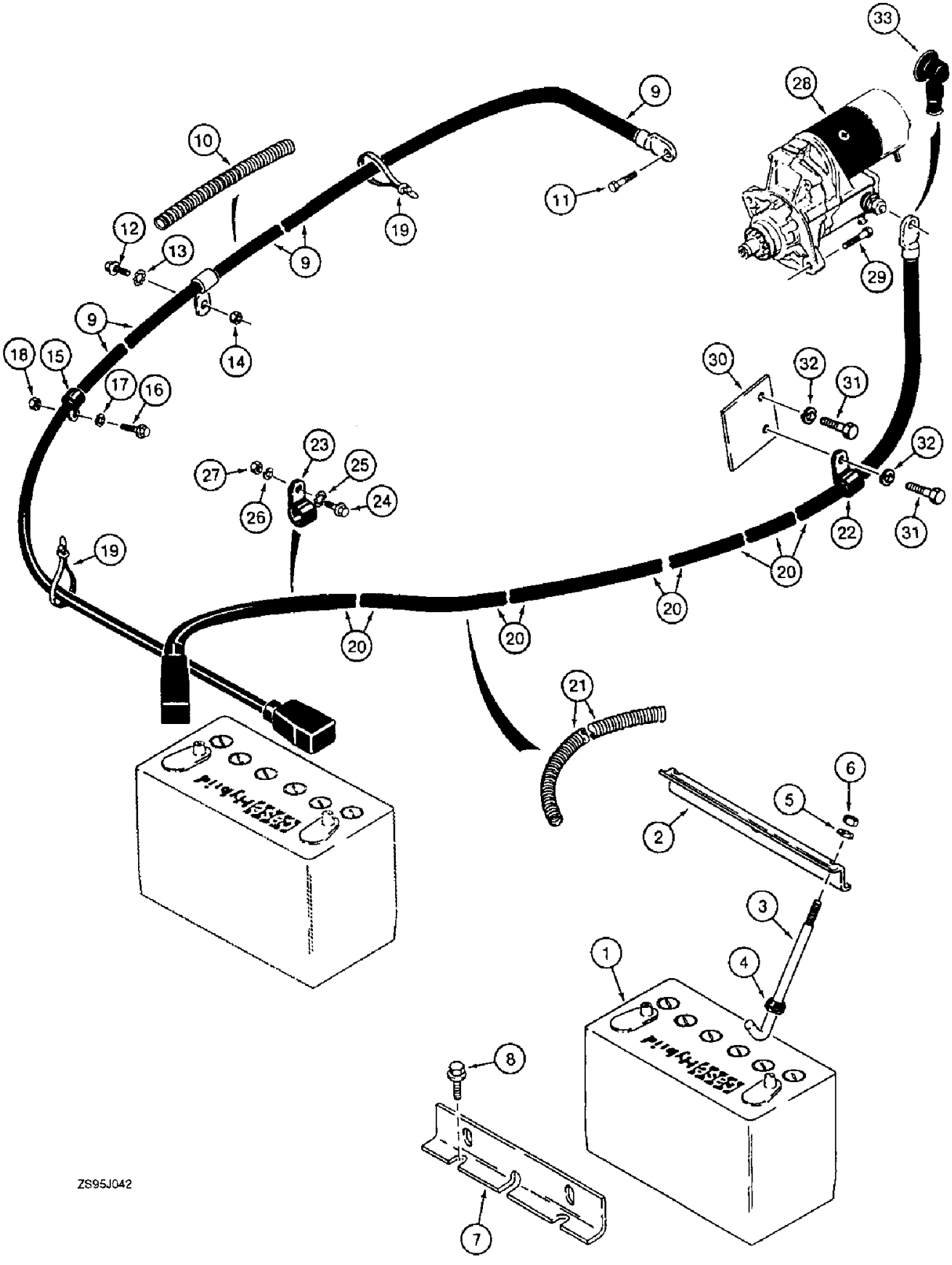
REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
25		F22316		1	RESISTOR - 75 ohm
27		495-11028		1	WASHER 1/4", SAE (flat, 9/32 x 5/8 x 1/16") 1/4", SAE
28		231-1444		1	NUT 1/4"-20, GB NUT, LOCK, 1/4"-20, GB
29	1	120399A1		1	RELAY - 12 volt, used with 126269A1 harness, item 44A
30		413-412		2	BOLT Hex, 1/4"-20 x 3/4", G5, Full Thd - hex, 1/4 NC x 3/4 inch
31		231-1444		2	NUT 1/4"-20, GB NUT, LOCK, 1/4"-20, GB
32	2	A149800		2	FUSE - red, 10 ampere, red
33	2	140-107		2	SCREW Cross Pan Hd, #10-24 x 3/4"
34		86625057		2	NUT #10-24, GB NUT, LOCK, #10-24, GB
35		1983394C1		2	RELAY - electrical
36		140-107		2	SCREW Cross Pan Hd, #10-24 x 3/4"
37		86625057		2	NUT #10-24, GB NUT, LOCK, #10-24, GB
38		R54064		1	IGNITION SWITCH SWITCH - lamp
39	2	A149804		1	FUSE - light green, 30 ampere
40		R58073		1	PANEL - instrument mounting
41		413-812		2	BOLT Hex, 1/2"-13 x 3/4", G5, Full Thd - hex, 1/2 NC x 3/4 inch
42		80679		2	LOCK WASHER 1/2" WASHER, LOCK, 1/2"
43		L18337		UAR	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon
44	3	R58030		1	HARNESS - front wiring and instrument panel,no longer available, see note below
44A		126269A1		1	HARNESS - front wiring and instrument panel, includes fuse block, see Figure 4-18 for continuation of harness
26		413-420		1	BOLT Hex, 1/4"-20 x 1 1/4", G5

(1) #29 IS NOT SQUARE LIKE IN PICTURE - IT IS A STARTER SOLENOID- SEE PICTURE IN 550G FIG 4-11. IF

(2) Fuse block is part number 245435C1

(3) Replace R58030 Harness with one 126269A1 Harness, one 120399A1 Relay, two 495-11028 Washer and two 829-

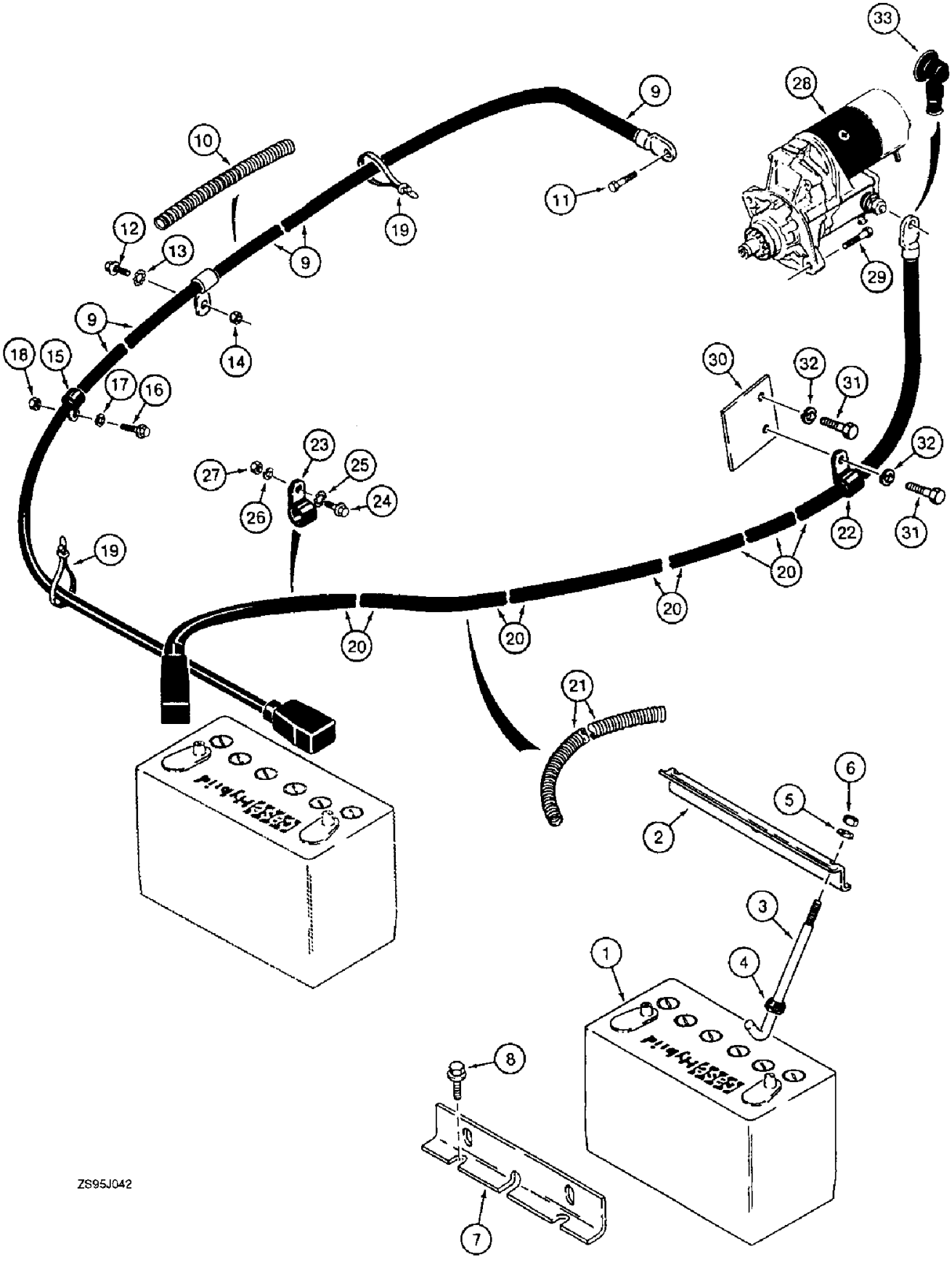
BATTERY MOUNTING, CABLES, AND STARTER



BATTERY MOUNTING, CABLES, AND STARTER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		BMF31E		1	DRY BATTERY BATTERY - dry, 12 volt, 700 amperes
2		R51648		1	LARGE PLATE BRACKET - battery retaining
3		D59707		2	BOLT - J-type, 10 inch (254 mm) long
4		248-2198		2	GROMMET 3/8" ID x 5/8" Groove Dia - rubber, 5/8 inch groove diameter
5		495-11041		2	WASHER 3/8", SAE (Flat, 13/32 x 13/16 x 1/16") 3/8", SAE
6		232-4116		2	NUT 3/8"-16, GC NUT, LOCK, 3/8"-16, GC
7		R50651		1	BRACKET PLATE - battery mounting
8		160-107		2	BOLT Hex Flg, 1/2"-13 x 1 1/4", G8, Full Thd
9		R57999		1	NEG BATTERY CABLE CABLE - battery
10		R42370		1	CABLE SHEATH - Conduit - 70 inch (1778 mm) long, cut from R44806 bulk conduit, negative battery cable, see below
11		R54620		1	SCREW BOLT - heavy hex flange, special, negative battery cable to torque converter
12		160-107		1	BOLT Hex Flg, 1/2"-13 x 1 1/4", G8, Full Thd
13		493-11052		1	LOCK WASHER Ext-Int Tooth, 1/2" WASHER - internal-external tooth lock, 1/2 inch
14		425-108		1	NUT 1/2"-13, G5 NUT, , Hex 1/2"-13, G5
15		515-23222		1	CLAMP 7/8", Insul, 3/8" Bolt P-type, To seat and tank frame 7/8", Insul, 3/8" Bolt
16		160-103		1	BOLT Hex Flg, 3/8"-16 x 1 1/4", G8, Full Thd
17		492-11038		1	LOCK WASHER 3/8"
18		425-106		1	NUT 3/8"-16, G5
19		L18337		UAR	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon

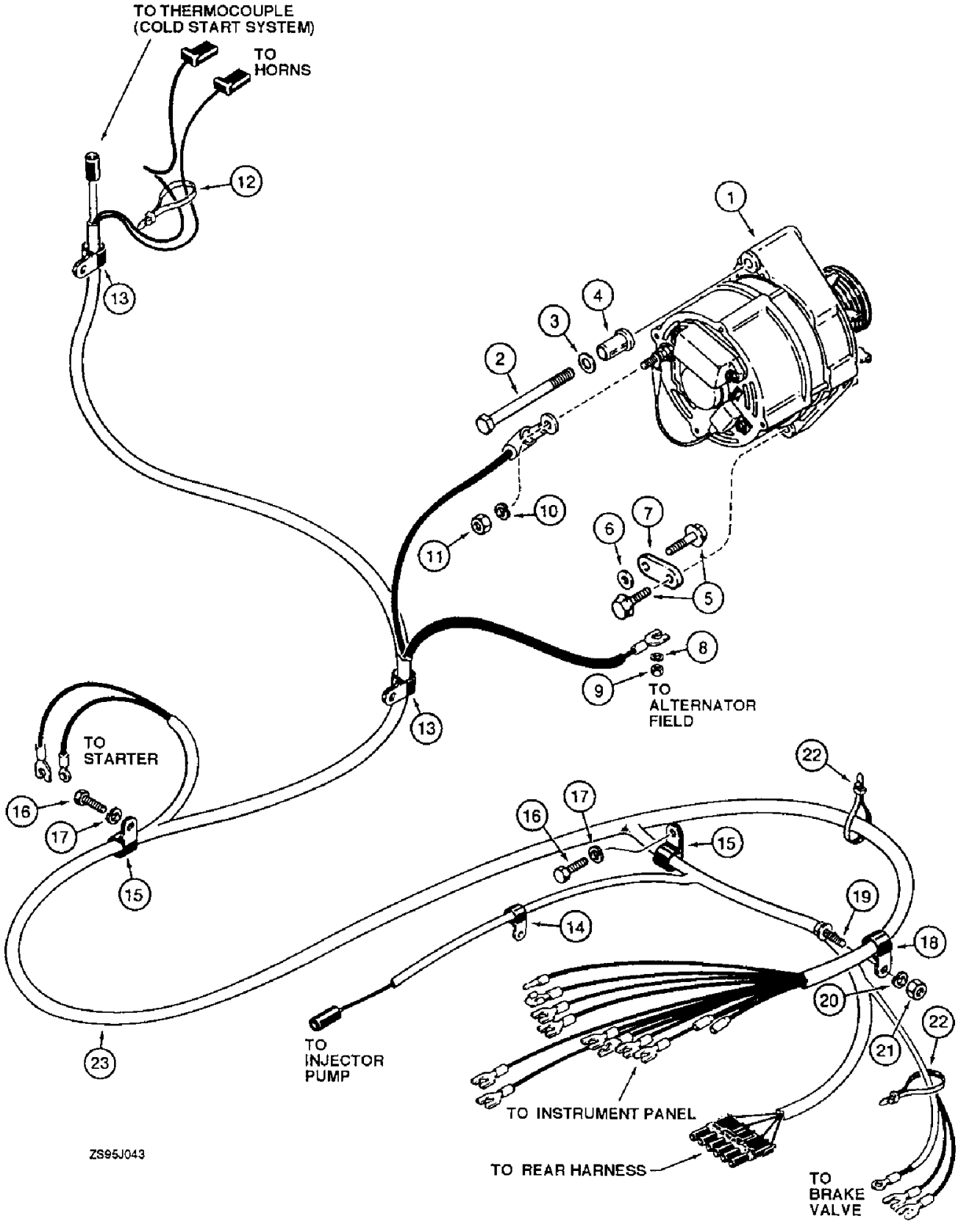
BATTERY MOUNTING, CABLES, AND STARTER



BATTERY MOUNTING, CABLES, AND STARTER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
20		R57998		1	NEG BATTERY CABLE CABLE - battery, positive
21		R58000		1	LOOM CONDUIT - 71-1/2 inch (1841 mm) long
22		R40419		1	CLAMP - twist, special, positive battery cable and front wiring harness at decal plate below starter
23		515-23222		1	CLAMP 7/8", Insul, 3/8" Bolt P-type, To seat and tank frame 7/8", Insul, 3/8" Bolt
24		160-103		1	BOLT Hex Flg, 3/8"-16 x 1 1/4", G8, Full Thd
25		493-11039		1	LOCK WASHER 3/8", Int-Ext Tooth WASHER - internal-external tooth lock, 3/8 inch
26		492-11038		1	LOCK WASHER 3/8"
27		425-106		1	NUT 3/8"-16, G5
28		REF		1	INSTRUCTION STARTER ASSEMBLY - engine, new, parts list figures 4-2 and 4-6
29		R54620		2	SCREW BOLT - heavy hex flange, special
30		109697A1		1	PLATE ASSY. PLATE - includes jump start decal, for decal see figure 9-40
31		614-12025		2	BOLT Hex, M12 x 25, 8.8 - hex, full threads, 12 - 1.75 x 25 mm
32		892-11012		2	LOCK WASHER M12 WASHER, LOCK, M12
33		L126713		1	BOOT - plastic, at starter, if used
		R44806		UAR	LOOM CONDUIT - bulk, 88-1/2 inch (2248 mm) long

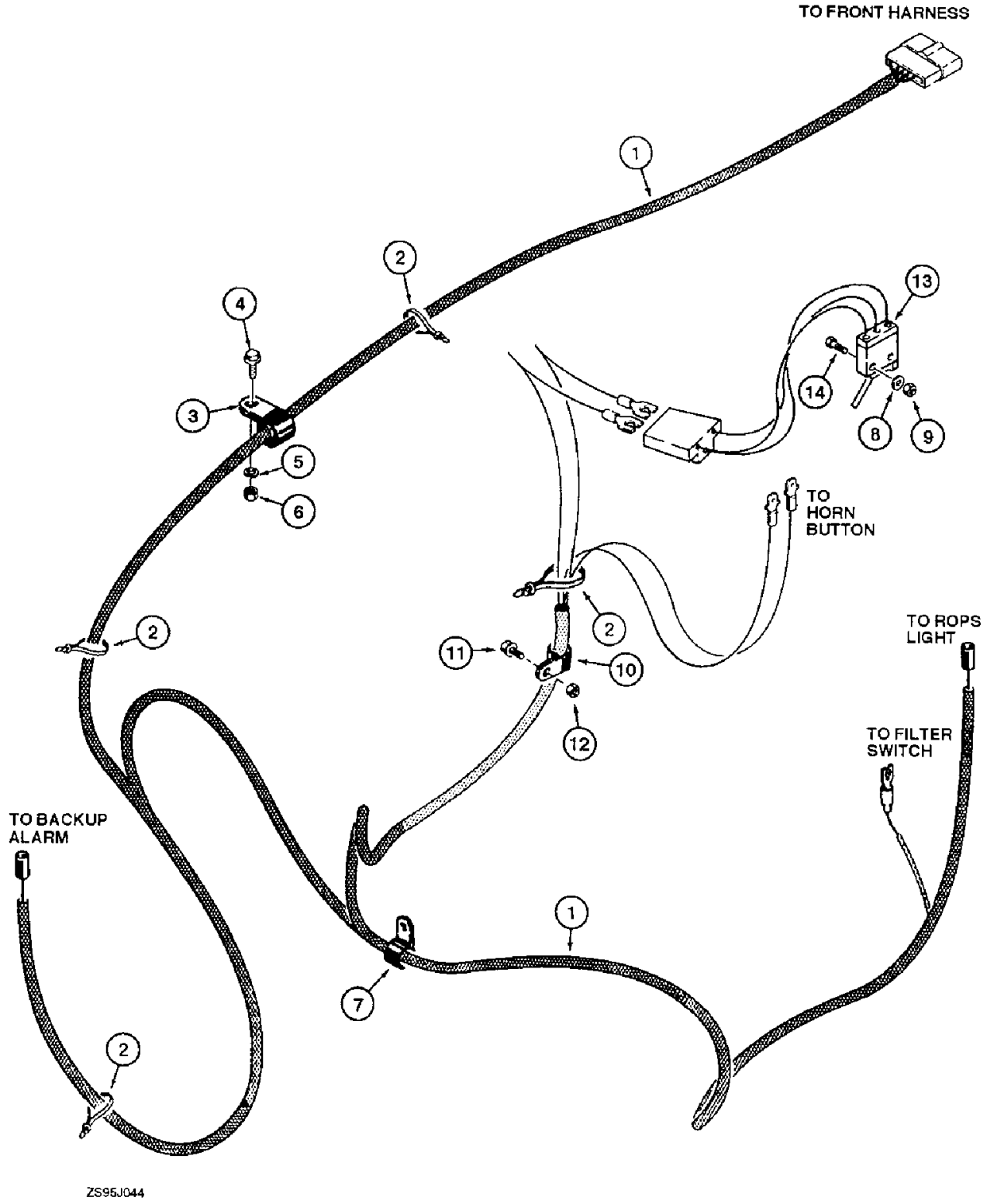
FRONT WIRING HARNESS AND ALTERNATOR MOUNTING



FRONT WIRING HARNESS AND ALTERNATOR MOUNTING

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		A187873		1	ALTERNATOR ASSEMBLY - engine, 65 ampere, parts list figure 4-10.
2		814-10100		1	BOLT Hex, M10 x 100, 8.8 - hex, 10 - 1.5 x 100 mm
3		892-11010		1	LOCK WASHER M10
4		J902469		1	SPACER - alternator mounting
5		855-8020		2	BOLT Hex Flg, M8 x 20, 10.9 - heavy hex flange, 8 - 1.25 x 20 mm, class 10.9
6		A140282		1	WASHER - flat, special
7		J903089		1	SUPPORT BRACE - alternator mounting
8		892-11008		1	LOCK WASHER M8 WASHER, LOCK, M8
9		829-1408		1	NUT M8, Cl 10 - hex, 8 mm - 1.25 grade 10
10		892-11005		1	LOCK WASHER M5 WASHER, LOCK, M5
11		824-1405		1	NUT M5, Cl 5
12		L18337		1	CABLE TIE 9.95"-12.1" lg STRAP - tie, used when options not used
13		515-23127		2	CLAMP 1/2", Insul, 3/8" Bolt P-type 1/2", Insul, 3/8" Bolt
14		49832		1	CLAMP - P-type, 5/16 inch ID
15		515-25190		2	CLAMP 3/4", Insul, 1/2" Bolt P-type 3/4", Insul, 1/2" Bolt
16		614-12025		2	BOLT Hex, M12 x 25, 8.8 - hex, full threads, 12 - 1.75 x 25 mm
17		892-11012		2	LOCK WASHER M12 WASHER, LOCK, M12
18		S15544		1	CLAMP 1 5/16", Insul, 3/8" Bolt - harness
19		160-103		1	BOLT Hex Flg, 3/8"-16 x 1 1/4", G8, Full Thd
20		492-11038		1	LOCK WASHER 3/8"
21		425-106		1	NUT 3/8"-16, G5
22		L18337		UAR	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon
23		126269A1		1	HARNESS - front wiring, see figure 4-14 for instrument panel wiring

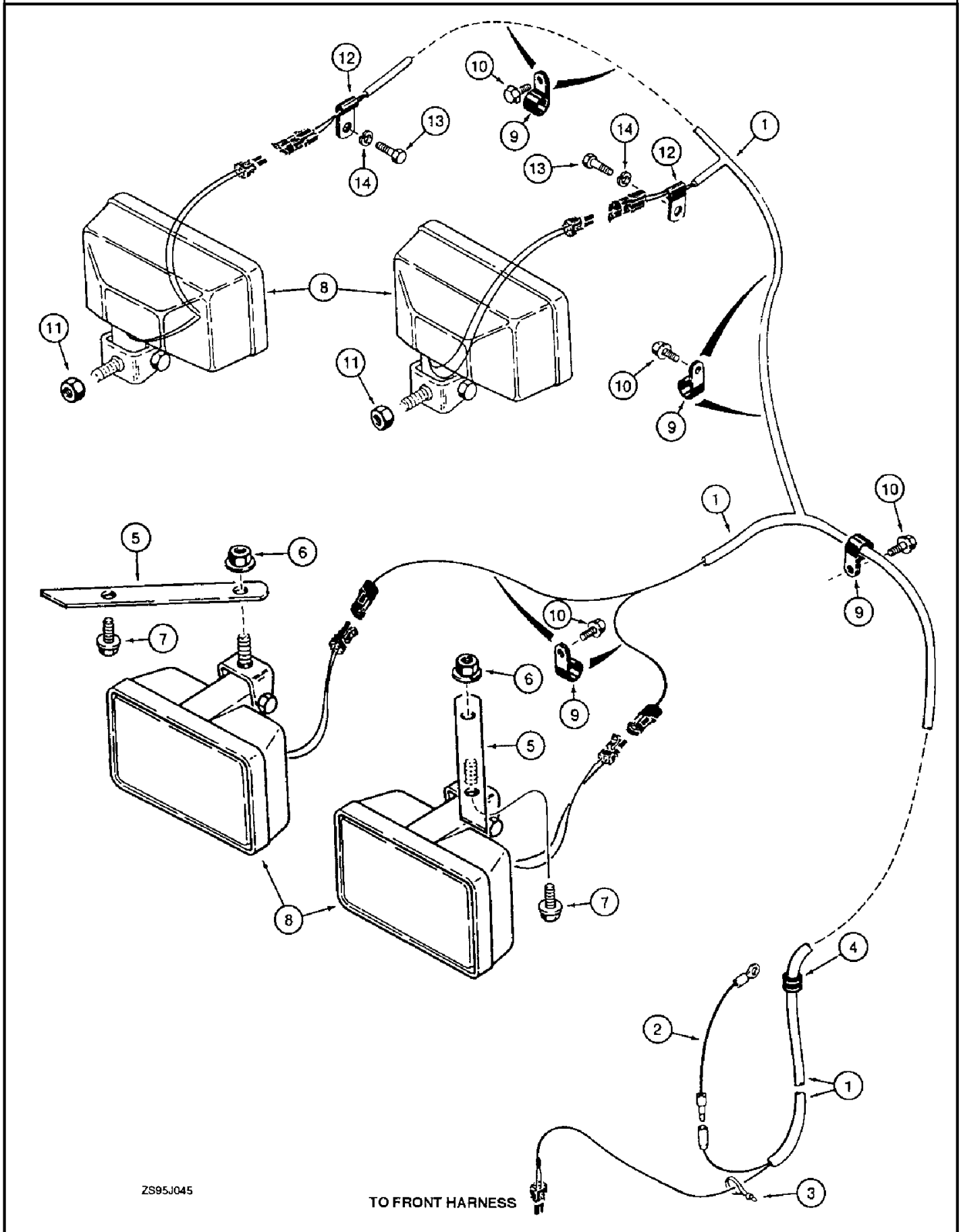
REAR WIRING HARNESS AND CONNECTIONS



REAR WIRING HARNESS AND CONNECTIONS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		107226A1		1	HARNESS - rear wiring
2		L18337		UAR	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon
3		515-23127		1	CLAMP 1/2", Insul, 3/8" Bolt P-type 1/2", Insul, 3/8" Bolt
4		160-102		1	BOLT Hex Flg, 3/8"-16 x 1", G8, Full Thd
5		492-11038		1	LOCK WASHER 3/8"
6		425-106		1	NUT 3/8"-16, G5
7		515-23159		1	CLAMP 5/8", Insul, 3/8" Bolt - P type 1/2 inch ID
8		495-31016		2	WASHER #6
9		231-14106		2	NUT #6-32, GB NUT - hex, self-locking, No. 6 NC
10		515-2295		1	CLAMP 3/8", Insul, 5/16" Bolt - P-type, 3/8 inch ID
11		458-512		1	BOLT Hex Flg, 5/16"-18 x 3/4", G5, Full Thd
12		425-105		1	NUT 5/16"-18, G5
13		1343288C2		1	LIMIT SWITCH SWITCH - neutral start
14		440-10616		2	SCREW Cross Pan Hd, #6-32 x 1"

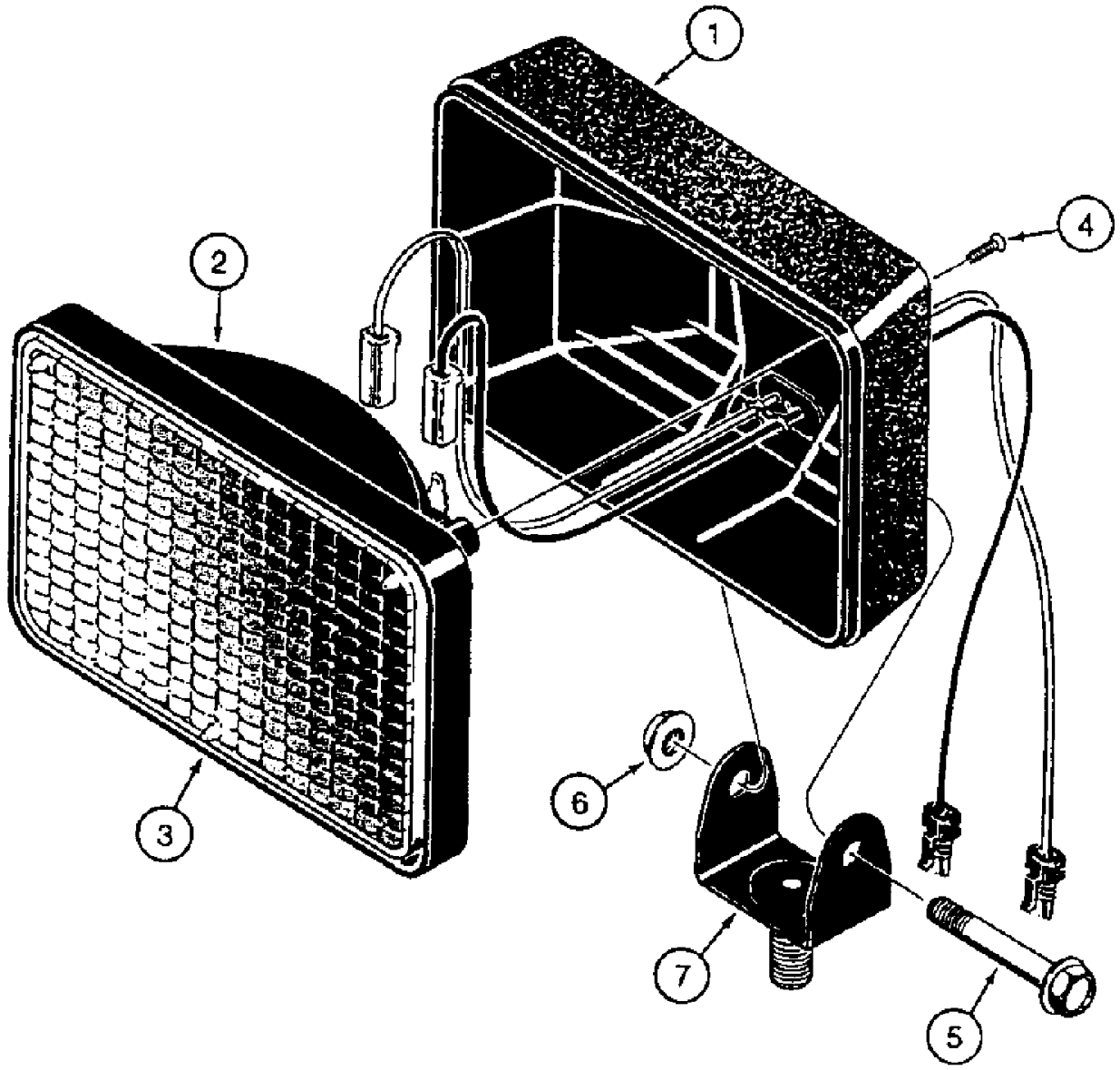
HALOGEN LAMPS AND WIRING



HALOGEN LAMPS AND WIRING

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58397		1	HARNESS - front
2		R47747		1	ELECTRICAL WIRE WIRE - ground, rear lamp harness
3		L18337		1	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon
4		D42106		1	GROMMET - rubber, rear lamp harness through hydraulic reservoir frame
5		R53887		2	SUPPORT BRACKET - mounting, rear lamp mounting, use rear screen mounting hardware, on models without rear screen, use item 7, 160-106 bolts
6		231-5148		2	BEARING LOCK NUT Flg, USR, 1/2"-13
7		160-106		2	BOLT Hex Flg, 1/2"-13 x 1", G8, Full Thd
8		D137294		4	LIGHT ASSY. LAMP ASSEMBLY - front driving and rear flood, parts list figure 4-24
9		515-22127		7	CLAMP 1/2", Insul, 5/16" Bolt - 1/2 inch ID, lamp harness to ROPS canopy
10		281-18712		7	SELF-TAP SCREW Hex Wash Hd, 1/4" x 3/4" SCREW - self-tapping, hex washer head, 1/4 NC x 3/4 inch
11		425-148		2	JAM NUT Jam, 1/2"-13, G5 - hex, jam, 1/2 inch NC
12		515-2363		2	CLAMP M6.3, Insul, 3/8" Bolt - P-style, 1/4 inch diameter, to ROPS canopy, at front lamps
13		413-610		2	BOLT Hex, 3/8"-16 x 5/8", G5, Full Thd
14		492-11038		2	LOCK WASHER 3/8"

LAMP ASSEMBLY - FRONT AND REAR FLOOD



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LAMP ASSEMBLY - FRONT AND REAR FLOOD

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		D137294		4	LIGHT ASSY. LAMP ASSEMBLY - front driving and rear flood
1		NSS		1	NOT SERVICED SEPARATELY SHELL - lamp
2		NSS		1	NOT SERVICED SEPARATELY RETAINER - shell
3		F45230		1	HEADLIGHT BULB - halogen
4		273-5048		2	SELF-TAP SCREW Slotted Flat Hd, #8 x 1/2" SCREW - self-tapping, flat head slotted, No. 8-18 x 1/2 inch
5		121-232		1	BOLT Hex Flg, 5/16"-18 x 2", Serr
6		230-4215		1	NUT 5/16"-18, GA NUT - hex, self locking, 5/16 inch NC
7		N14626		1	SUPPORT BRACKET - lamp

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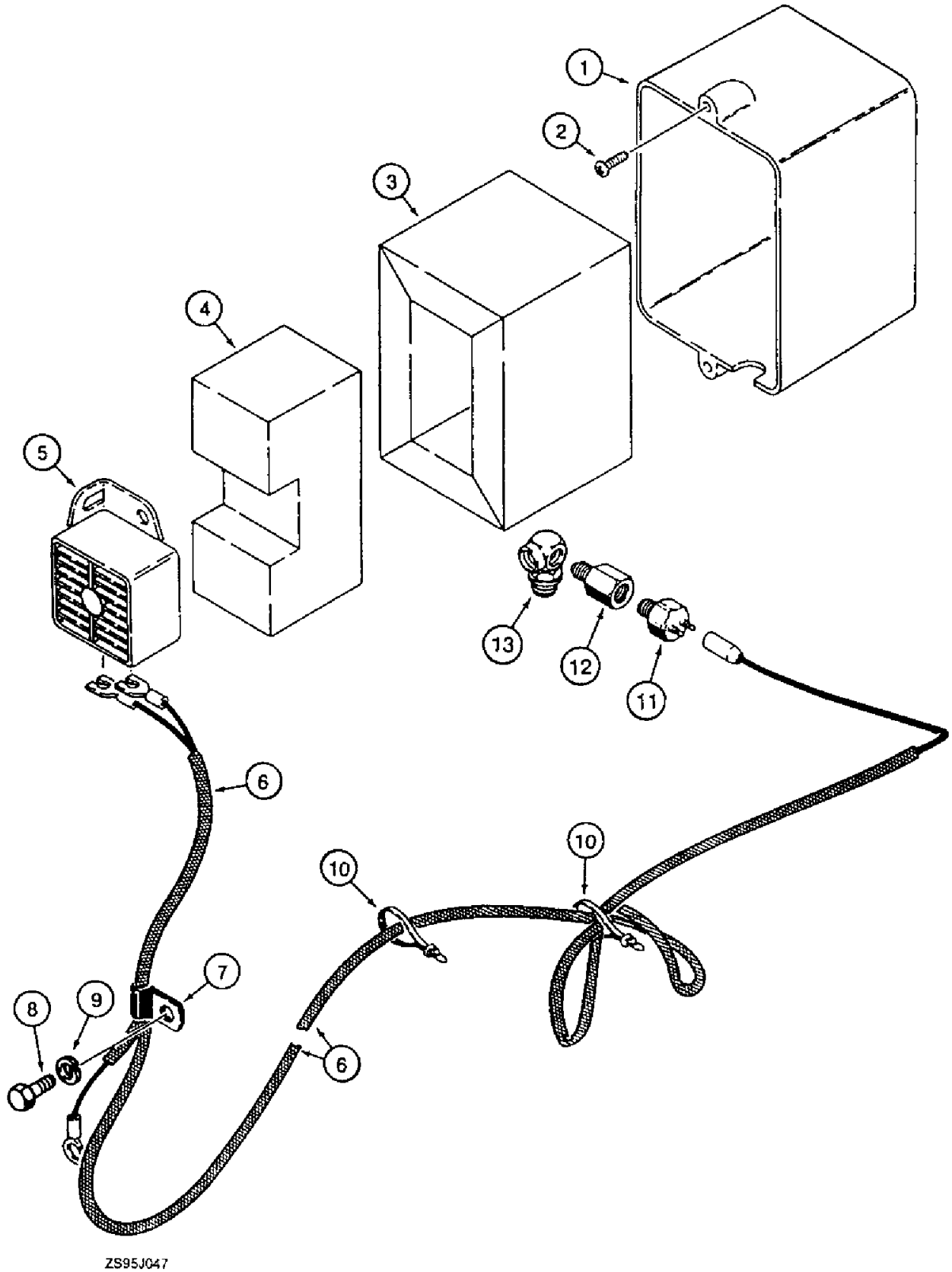
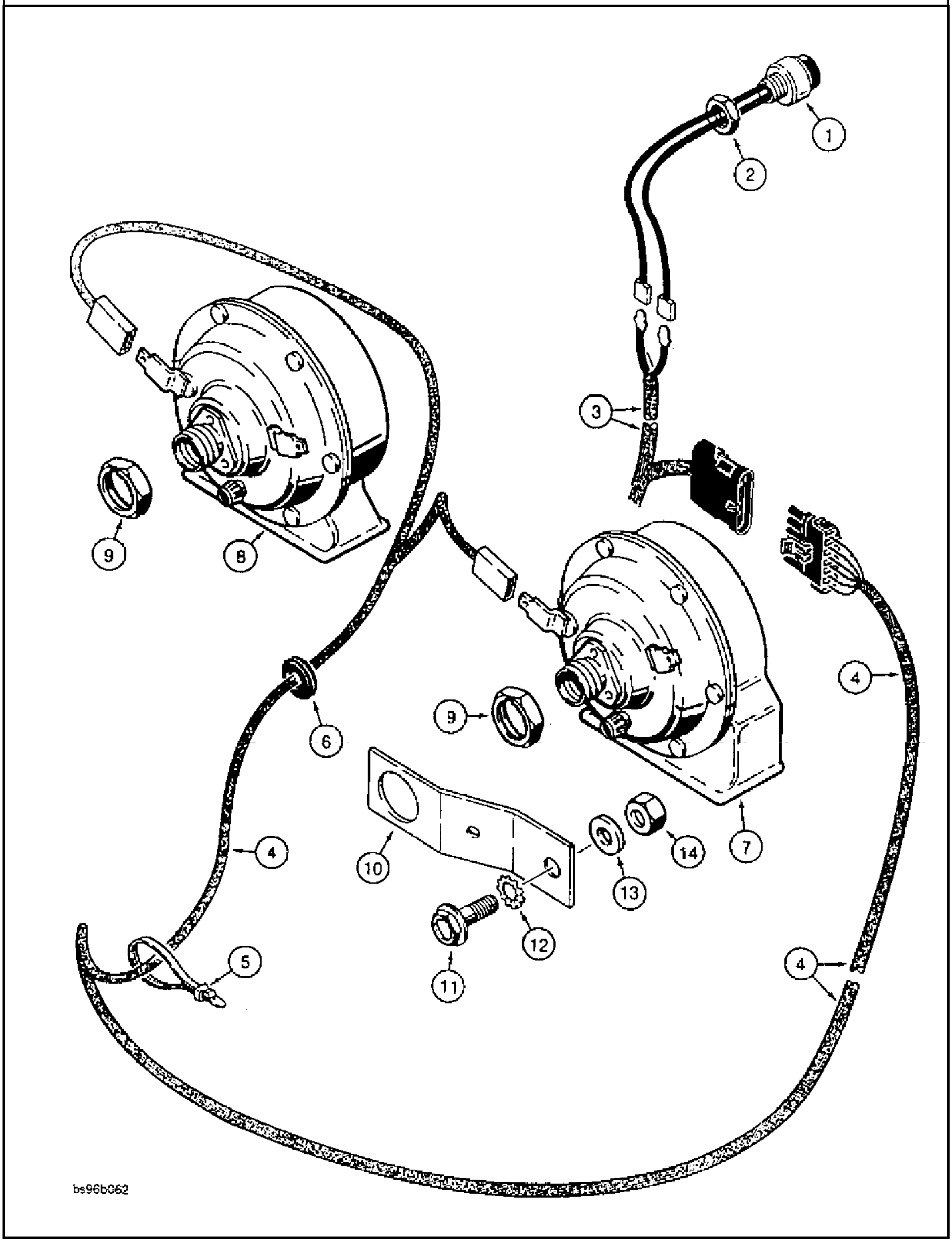
BACKUP ALARM



BACKUP ALARM

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R50647		1	BOX COVER - plastic, backup alarm
2		261-55712		2	SELF-TAP SCREW Cross Pan Hd, 1/4"-20 x 3/4"
3		R50648		1	FOAM SEAL - foam,backup alarm box
4		R51815		1	PAD - foam, 2 (51) x 2-1/2 (64) x 10 inch (254 mm) long, cut a double thickness from R30870 bulk foam
5		L112318		1	ALARM - backup, bolts to rear access cover
6		107225A1		1	ELECTRICAL WIRE HARNESS - backup alarm and ground, with flex conduit covering
7		515-22190		1	CLAMP 3/4", Insul, 5/16" Bolt P-type 3/4", Insul, 5/16" Bolt
8		413-610		1	BOLT Hex, 3/8"-16 x 5/8", G5, Full Thd
9		492-11038		1	LOCK WASHER 3/8"
10		L18337		2	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon
11		D139904		1	SWITCH - pressure, backup alarm
12		R52651		1	FITTING SNUBBER - pressure switch
13		G107178		1	ELBOW - 90 degree, reverse line at transmission control valve, see parts list on figure 6-26 or 6-28
		R30870		UAR	PAD - bulk, 54 (1372 mm) x 72 (1829 mm) x 1 inch (25 mm) thick

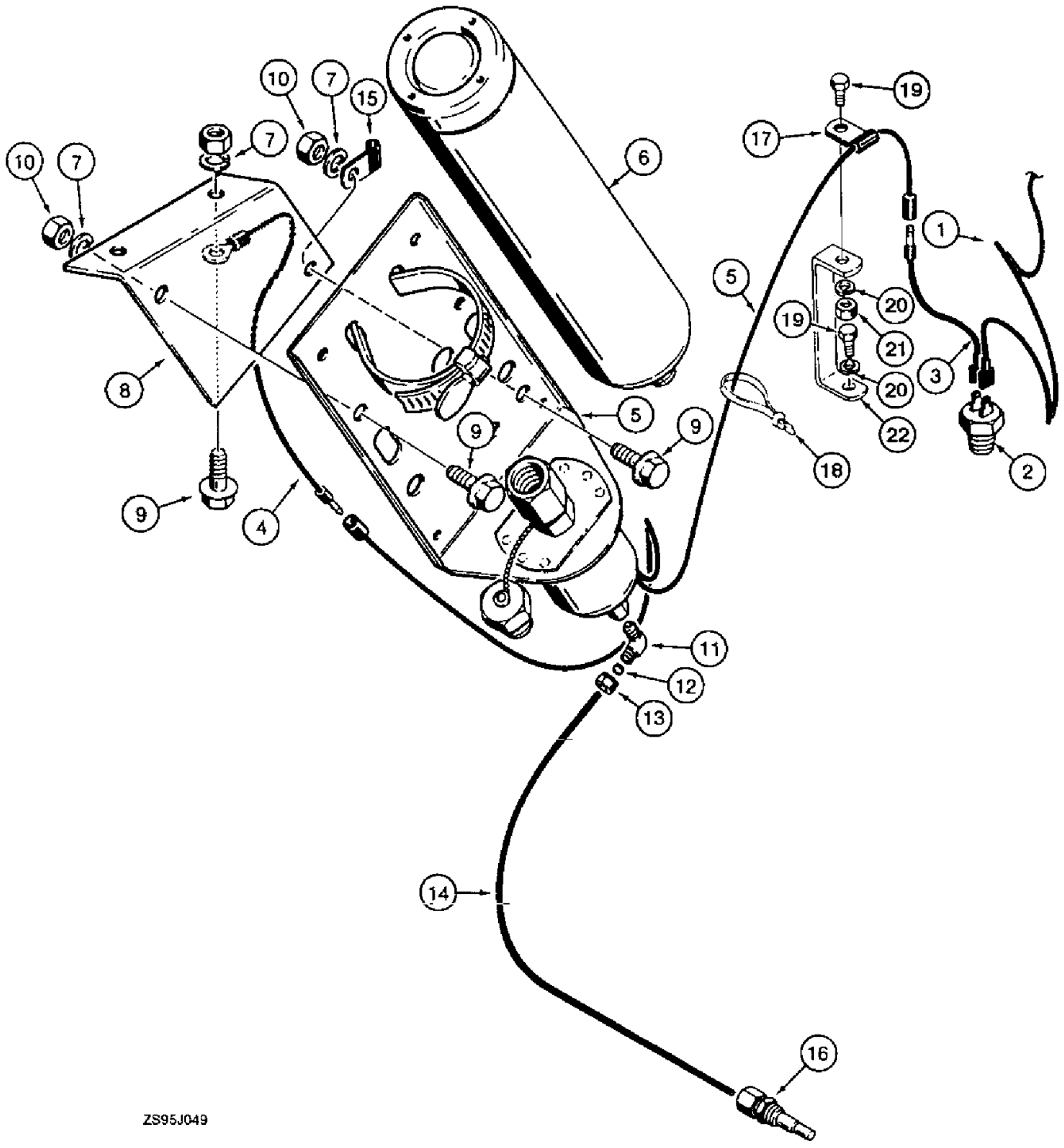
HORN



HORN

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58727		1	SWITCH - push button
2		425-1510		1	JAM NUT Jam, 5/8"-18, G5 - hex, jam, 5/8 inch NF
3		107226A1		1	HARNESS - rear wiring, see Figure 4-20 for continuation of harness
4		REF		1	INSTRUCTION HARNESS - front wiring, see Figure 4-14 for correct harness replacement parts
5		L18337		1	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon
6		D37936		1	GROMMET - rubber, horn wire
7		D123205		1	HORN - 12 volt, right hand
8		R45962		1	HORN - 12 volt, left hand
9		L30866		2	LOCK NUT - hex, special
10		R58788		2	BRACKET - horn mounting
11		160-107		2	BOLT Hex Flg, 1/2"-13 x 1 1/4", G8, Full Thd
12		493-11052		2	LOCK WASHER Ext-Int Tooth, 1/2" WASHER - internal-external tooth lock, 1/2 inch
13		496-21053		2	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened
14		425-108		2	NUT 1/2"-13, G5 NUT, , Hex 1/2"-13, G5

COLD START SYSTEM



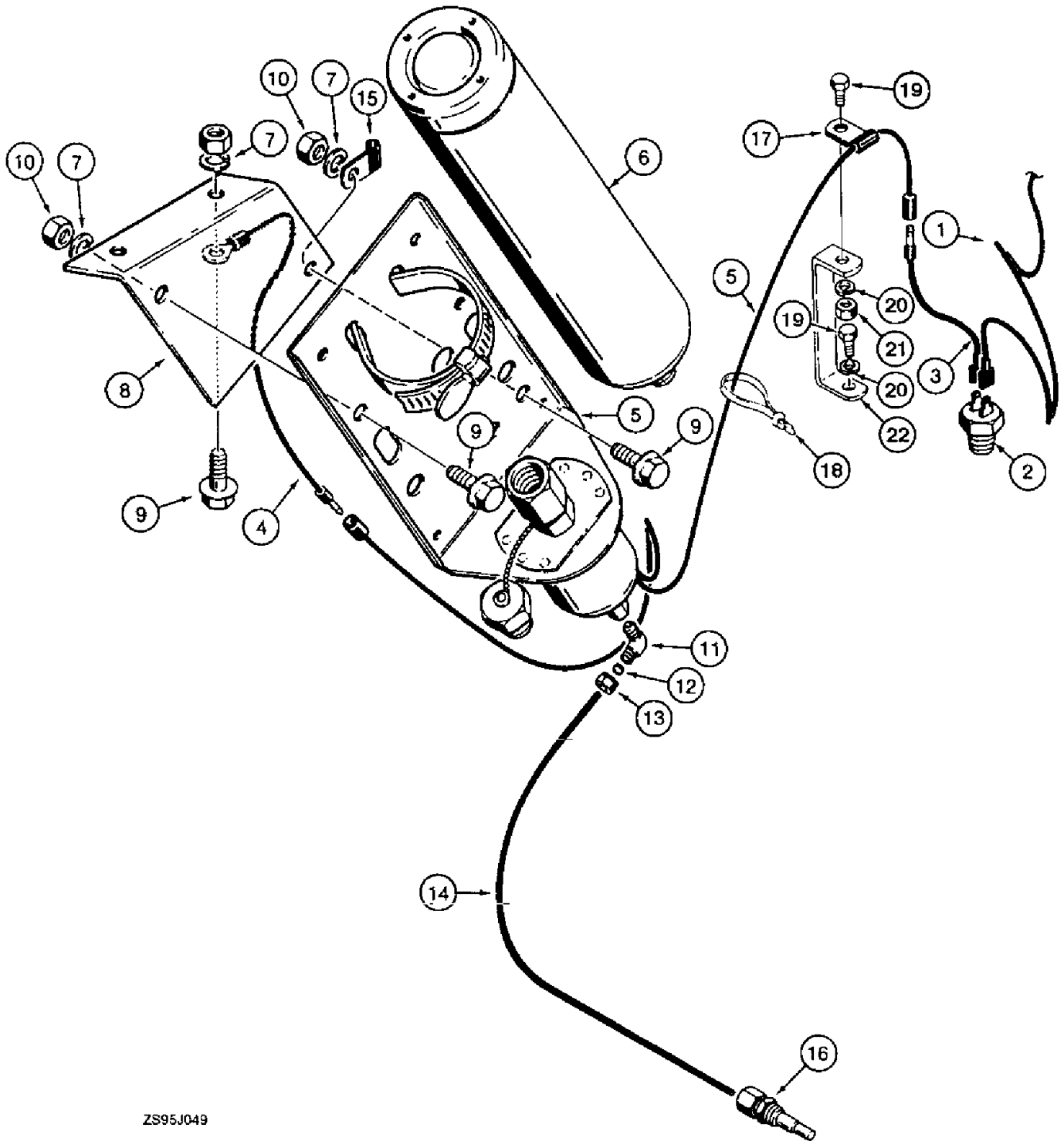
COLD START SYSTEM

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		126269A1		1	HARNESS - front wiring, see figure 4-18 for continuation of harness
2		A172117		1	SWITCH THERMOCOUPLE - in engine cylinder head, below intake manifold inlet tube
3		182450A1		1	ELECTRICAL WIRE WIRE - cold start, injection valve
4		R51632		1	ELECTRICAL WIRE WIRE - ground, to valve mounting bracket
5		A172116		1	VALVE ASSEMBLY - cold start, fluid injection, with bracket component parts not serviced separetely, 3 cc injection volume, 12 volt
6		A171940		1	CYLINDER - starting fluid
7		492-11038		4	LOCK WASHER 3/8"
8		R49374		1	SUPPORT BRACKET - mounting
9		160-102		4	BOLT Hex Flg, 3/8"-16 x 1", G8, Full Thd
10		425-106		4	NUT 3/8"-16, G5
11		222-615		1	ELBOW 90º, 5/16"-24 x 1/8" NPT, Comp 1/8 tube 90º, 5/16"-24 x 1/8" NPT, Comp
12		222-650		1	SLEEVE 1/8" Tube, Comp Tapered 1/8" Tube, Comp
13		222-660		1	BEARING LOCK NUT 5/16"-24, 45º Fl, Comp 1/8" tube OD 5/16"-24, 45º Fl, Comp
14	1	R40211		1	PLASTIC-RUBBER TUBE 0.125" OD x 10" L TUBE - nylon, 10 inch (254 mm) long, cut from L60539X bulk tube
15		D43839		1	CLAMP - P-style, 1/8 inch diameter, at injection valve mounting bracket
16		A172900		1	NOZZLE CAP NOZZLE ASSEMBLY - atomizer, into side of intake manifold, component parts not serviced separately

(1) Cold Start Installation Kits can be ordered from the Machinery Price List. See the Machinery Price List for the correct

NOTE: Cold Start Installation Kits can be ordered from the Machinery Price List. See the Machinery Price List for the correct kit.

COLD START SYSTEM



COLD START SYSTEM

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
17		515-2348		1	CLAMP 3/16", Insul, 3/8" Bolt - P-style, 1/8 inch diameter, holds nylon tube on top of bracket at engine cylinder head, see figure 4-12, items 11 through 14 for bracket and mounting hardware
18		L18337		1	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon
19		614-10020		2	BOLT Hex, M10 x 20, 8.8, Full Thd
20		892-11010		2	LOCK WASHER M10
21		825-1410		1	NUT M10, Cl 8
22		R50427		1	BRACKET - stand-off
	1	L60539X		UAR	TUBE - bulk, nylon, 1/8 (3) ID x 168 inch (4267 mm) long

(1) Cold Start Installation Kits can be ordered from the Machinery Price List. See the Machinery Price List for the correct

NOTE: Cold Start Installation Kits can be ordered from the Machinery Price List. See the Machinery Price List for the correct kit.

SECTION INDEX

Tracks/Steering

5-02	TRACK FRAME, SPROCKET, ROLLER, AND RECOIL HOUSING
5-04	TRACK ADJUSTER AND IDLER MOUNTING
5-06	IDLER ASSEMBLIES, R52404 IDLER ASSEMBLY, LGP 64 INCH
5-08	ROLLER ASSEMBLIES, TRACK CARRIER ROLLER ASSEMBLY
5-10	TRACK GUARDS, TRACK GUARDS WITH \XD2 A\XD3 MEASURE
5-12	SEALED TRACK CHAIN, IF USED
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5-16	CASE LUBRICATED TRACK CHAIN, IF USED, EACH MASTER LINK
5-18	REAR PIVOT SHAFT AND RUBBER TRACK, REAR PIVOT SHAFT

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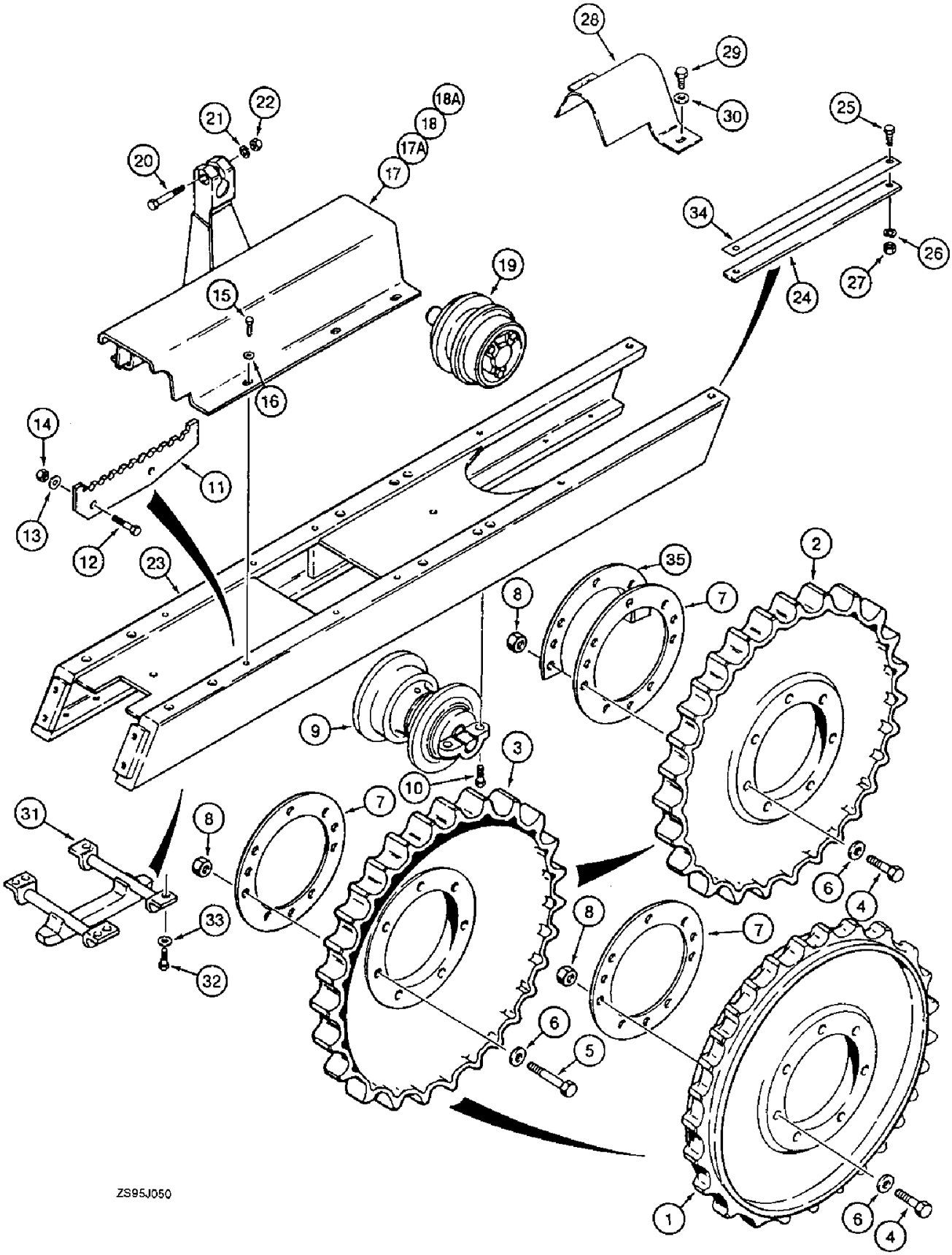
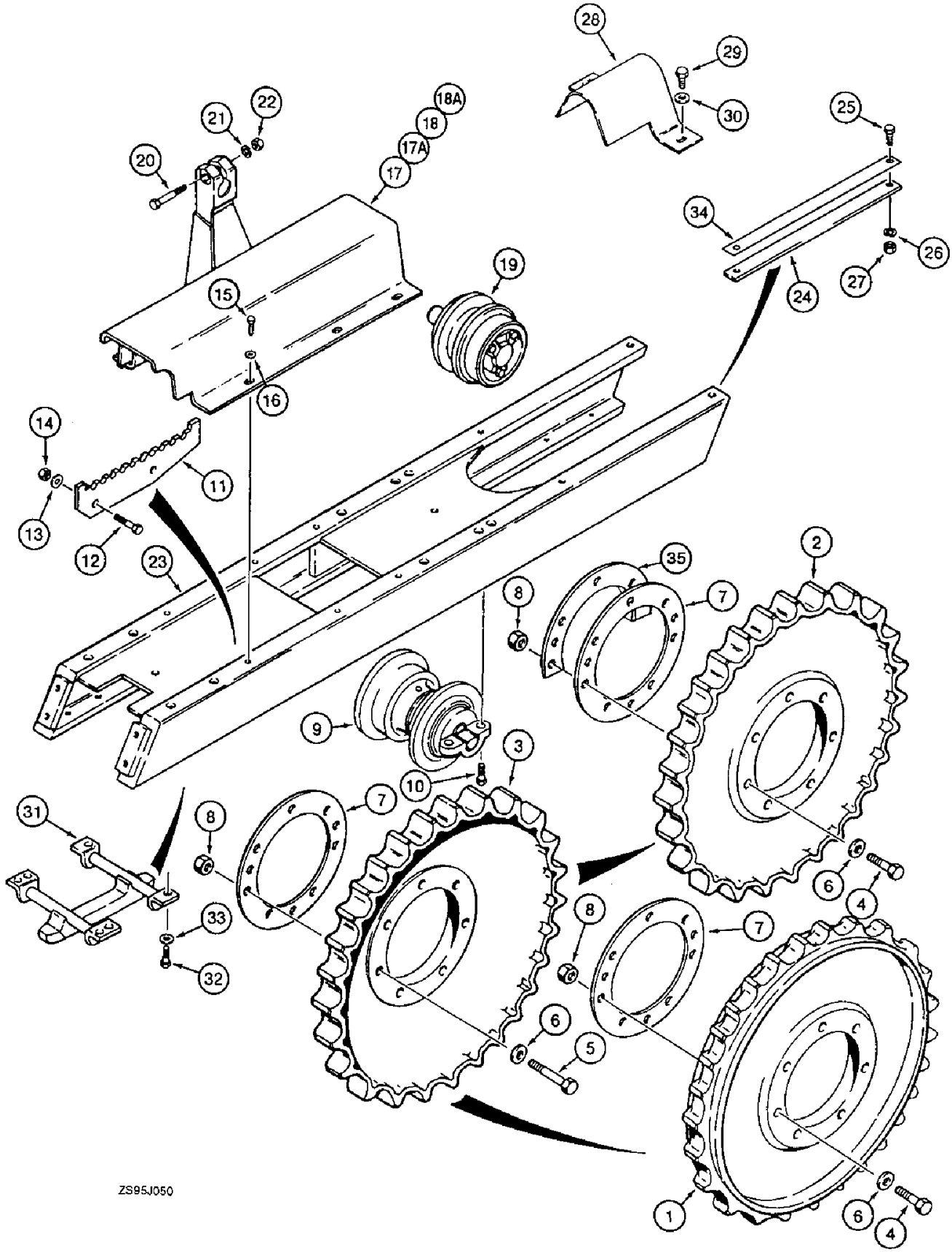
TRACK FRAME, SPROCKET, ROLLER, AND RECOIL HOUSING



TRACK FRAME, SPROCKET, ROLLER, AND RECOIL HOUSING

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R57765		2	SPROCKET ASSY. SPROCKET - for rubber track, 53 inch gauge long track models
2		R57298		2	DRIVE SPROCKET SPROCKET - for metal track, 53 inch gauge long track models
2		R57392		2	DRIVE SPROCKET SPROCKET - relieved, for metal track, 53 inch gauge long track models
3		R57281		2	DRIVE SPROCKET SPROCKET - 64 inch gauge LGP models only
4		R27954		14	BOLT - special, 3/4 NC x 2-3/4 inch (Replaces R56341)
5		R39270		14	BOLT - hex head, special, 3/4 NC x 3-1/4 inch
6		D34666		14	WASHER - flat, special
7		R46160		UAR	SHIM .032" Thk Sprocket .032" Thk
8		232-41112		14	NUT 3/4"-10, GC NUT, LOCK, 3/4"-10, GC
9		R57357		12	TRACK ROLLER ROLLER ASSEMBLY - track, parts list figure 5-8
10		106-91024		48	LOCK BOLT Locking, 5/8"-11 x 1 1/2", G5, Full Thd BOLT, Locking, 5/8"-11 x 1 1/2 ", G5, Full Thd
11		100776A1		2	STEP PLATE - step, 53 inch gauge models only
12		413-1044		4	BOLT Hex, 5/8"-11 x 2 3/4", G5 - hex, 5/8 NC x 2-3/4 inch
13		496-21066		4	WASHER 21/32" x 1 5/16" x .150" - flat, 21/32 x 1-5/16 x 5/32 inch, hardened
14		425-1010		4	NUT 5/8"-11, G5
15		326-816		10	BOLT Hex, 1/2"-13 x 1", G8, Full Thd
16		496-21053		10	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened
17		187917A1		1	HOUSING - recoil, with carrier roller bracket, right-hand, used on steel track models

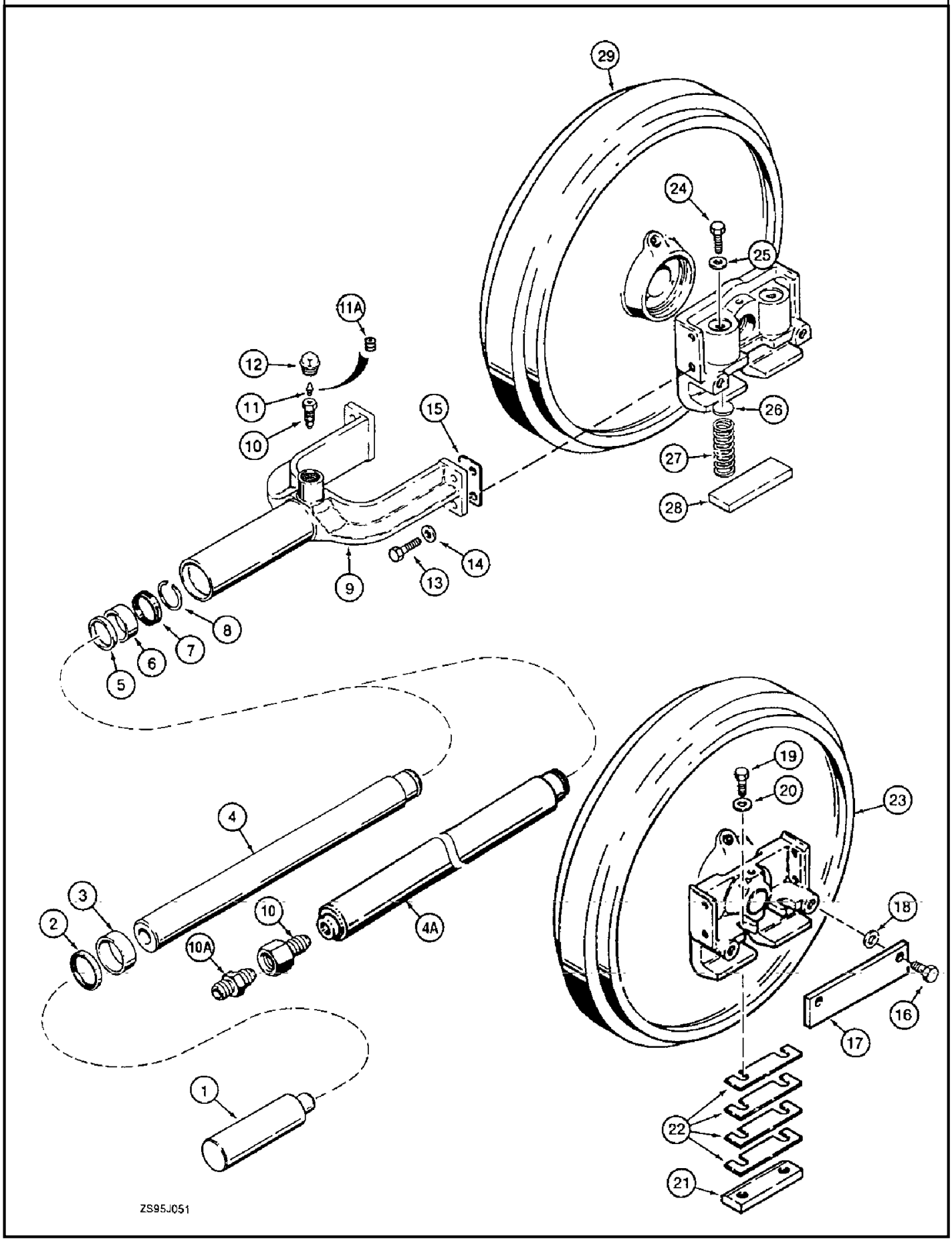
TRACK FRAME, SPROCKET, ROLLER, AND RECOIL HOUSING



TRACK FRAME, SPROCKET, ROLLER, AND RECOIL HOUSING

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
17A		187931A1		1	HOUSING - recoil, with carrier roller bracket, right-hand, used on rubber track models
18		187916A1		1	HOUSING - recoil, with carrier roller bracket, left-hand, used on steel track models
18A		187932A1		1	HOUSING - recoil, with carrier roller bracket, left-hand, used on rubber track models
19		R33965		2	ROLLER ASSEMBLY - carrier, parts list figure 5-8
20		413-848		2	BOLT Hex, 1/2"-13 x 3", G5 - hex, 1/2 NC x 3 inch
21		80679		2	LOCK WASHER 1/2" WASHER, LOCK, 1/2"
22		425-108		2	NUT 1/2"-13, G5 NUT, , Hex 1/2"-13, G5
23		175297A1		2	FRAME - track
24		R58373		4	BAR PLATE - wear, track frame
25		413-1032		8	BOLT Hex, 5/8"-11 x 2", G5 - hex, 5/8 NC x 2 inch
26		492-11062		8	LOCK WASHER 5/8" WASHER, LOCK, 5/8"
27		425-1010		8	NUT 5/8"-11, G5
28		R57631		2	GUARD - track adjuster, if used
29		326-816		4	BOLT Hex, 1/2"-13 x 1", G8, Full Thd If used Hex, 1/2"-13 x 1", G8, Full Thd
30		496-21053		4	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened
31		183844A1		4	GUIDE - for models with rubber track
32		113-2448		24	LOCK BOLT Locking, 1/2"-13 x 1 1/2", G8 BOLT, Locking, 1/2"-13 x 1 1/2", G8
33		496-21053		24	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened
34		R58722		UAR	SHIM 0.81mm Thk Wear plate 0.81mm Thk
35		117702A1		4	GUARD - final drive

TRACK ADJUSTER AND IDLER MOUNTING



TRACK ADJUSTER AND IDLER MOUNTING

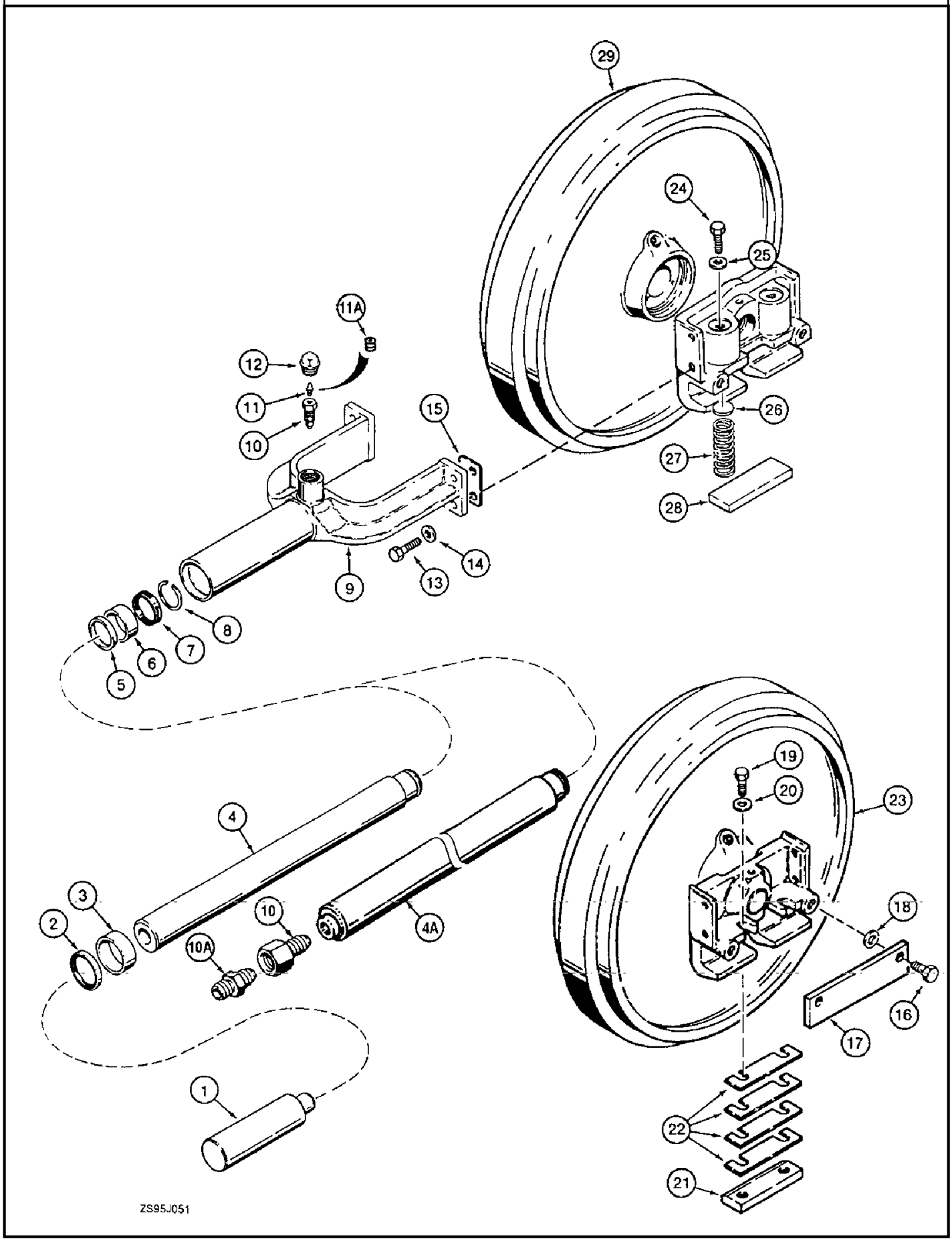
REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58451		2	SPACER - piston, used on steel track models
1		125061A1		2	TUBE 39.7 mm ID, 54 mm OD SPACER - piston, used on rubber track models, not shown
		R58480		2	FORK ADJUSTER ASSEMBLY - track, used on steel track models
		125636A1		2	CYLINDER ASSY. ADJUSTER ASSEMBLY - track, used on rubber track models
2	1	D95144		1	WIPER SEAL Wiper - piston rod
3	1	D35503		1	RING BUSHING - piston, recoil housing end
4		R58450		1	PISTON - track adjuster, used on steel track models
4A		125110A1		1	PISTON - track adjuster, used on rubber track models
5	1	R51794		1	RING, PISTON RING - backup
6	1	D37289		1	BUSHING - piston yoke end
7	1	D95382		1	SEAL - U-cup, piston
8	1	A27085		1	RING - retaining
9		R42184		1	YOKE - track adjuster
10		D35287		1	VALVE - check, track adjuster
10A		218-442		1	HYD CONNECTOR 1/2"-20, 37º x 1/8"-27, NPTF ADAPTER - straight 1/2-20 flare, track adjuster
11		219-1		1	LUBE NIPPLE 1/8"-27 x .66 lg FITTING - grease, straight, 1/8 PT x 21/32 inch, used on steel track only
11A		217-428		1	PLUG Hex Soc, 1/8"-27, Brass Used on rubber tracks only Hex Soc, 1/8"-27, Brass
12	2	221-29		1	DRAIN PLUG Sq Hd, 1 1/4"-11 1/2 NPTF (Replaces 217-532) Sq Hd, 1 1/4"-11 1/2 NPTF
13		413-820		8	BOLT Hex, 1/2"-13 x 1 1/4", G5, Full Thd - hex, 1/2 NC x 1-1/4 inch

(1) Part of Track Adjuster Seal Kit P/N 103729A1

(2) 217-532 IS IN SEVERAL CRAWLER CATALOGS AS A PLUG THAT GOES OVER A GREASE ZERK IN THE

For rubber track tensioner hydraulic circuit see figure 8-18.

TRACK ADJUSTER AND IDLER MOUNTING



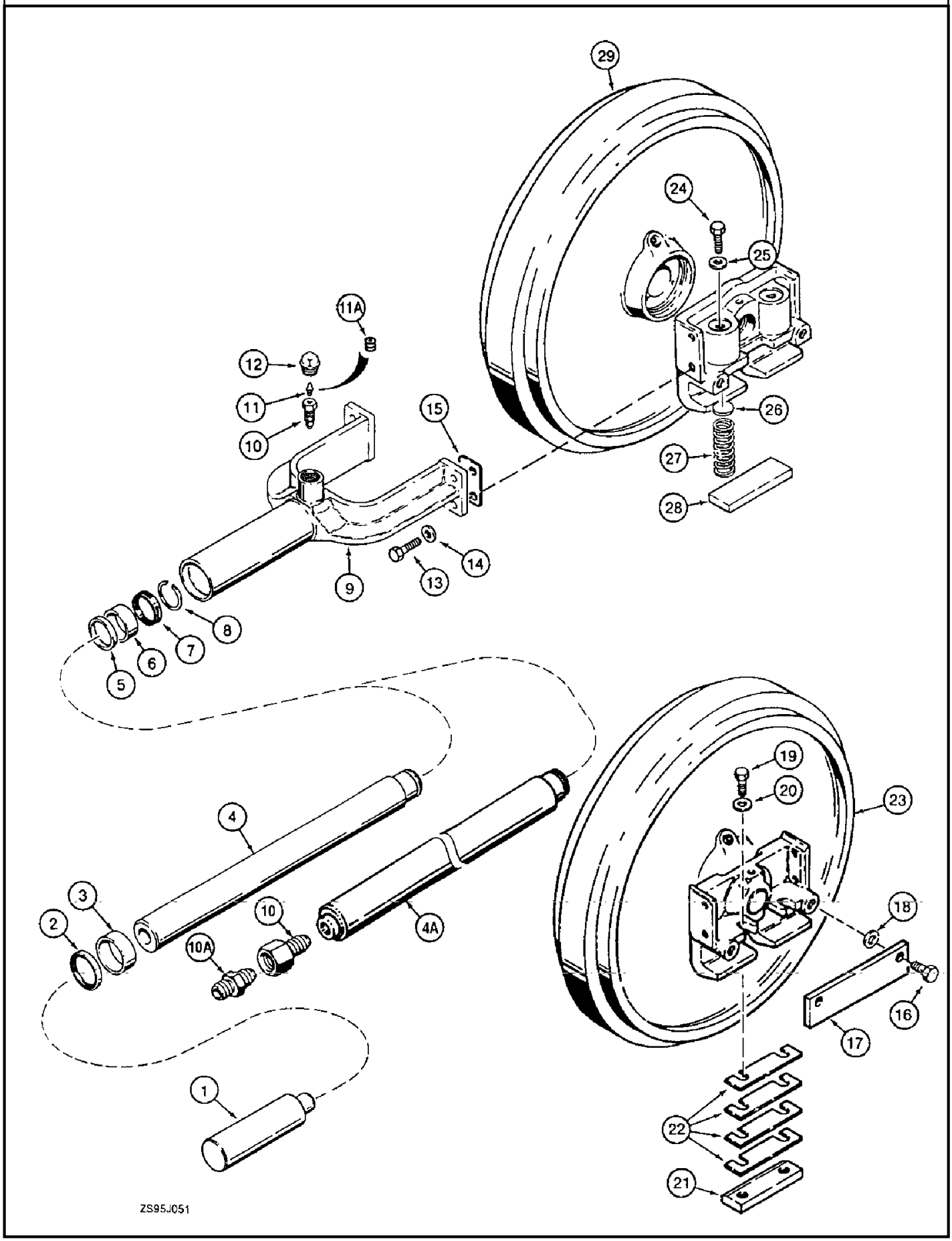
TRACK ADJUSTER AND IDLER MOUNTING

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
14		496-21053		8	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened
15		R37875		UAR	SHIM 0.813mm Thk (.032"), Idler bracket to adjuster 0.813mm Thk
16		413-1024		8	BOLT Hex, 5/8"-11 x 1 1/2", G5, Full Thd
17		R49772		4	LARGE PLATE PLATE - idler guide
18		D44330		UAR	SHIM .031" Thk (21/32" ID x 1-1/4" OD), Idler guide plate .031" Thk
19		413-820		8	BOLT Hex, 1/2"-13 x 1 1/4", G5, Full Thd - hex, 1/2 NC x 1-1/4 inch, LGP 64 inch gauge models
20		496-21053		8	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened, LGP 64 inch gauge models
21		R52401		4	LARGE PLATE BLOCK - idler support, LGP 64 inch gauge models
22		R52406		UAR	SHIM 0.81mm Thk Support block, LGP 64 inch gauge models 0.81mm Thk
23		R52404		2	STEERING IDLER IDLER ASSEMBLY - track, parts list Figure 5-06, replaced by R58710 idler assembly, see Figure 5-06, and 144392A2 idler kit, see below, LGP 64 inch gauge models
24	1	413-614		8	BOLT Hex, 3/8"-16 x 7/8", G5, Full Thd LGP 64 inch gauge models Hex, 3/8"-16 x 7/8", G5, Full Thd
25	1	495-21044		8	WASHER 3/8" (flat, 7/16 x 1 x 5/64 inch), LGP 64 inch gauge models 3/8"
26	1	R33245		8	SPRING SEAT SEAT - spring, LGP 64 inch gauge models
27	1	188866A1		8	SHOCK ABSORBER SPRING - recoil, LGP 64 inch gauge models
28	1	R58720		4	LARGE PLATE PLATE - track wear, LGP 64 inch gauge models
29		R58710		2	FRONT IDLER IDLER ASSEMBLY - track, parts list figure 5-6., LGP 64 inch gauge models

(1) Part of Idler Kit P/N 144392A2

For rubber track tensioner hydraulic circuit see figure 8-18.

TRACK ADJUSTER AND IDLER MOUNTING



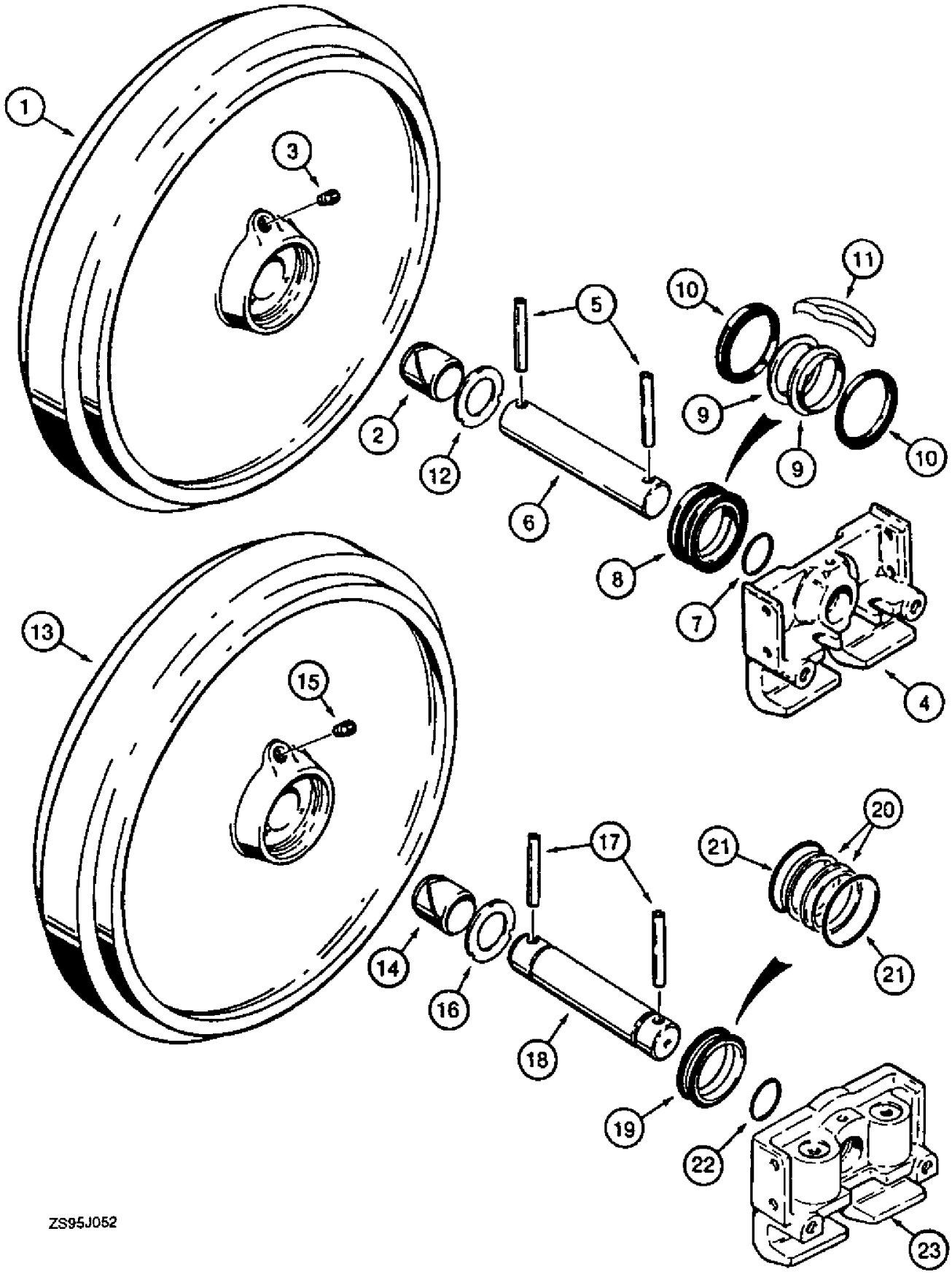
TRACK ADJUSTER AND IDLER MOUNTING

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		103729A1		1	KIT - repair, track adjuster seal, Includes: Ref. 2, 3 and 5-8, LGP 64 inch gauge models
	1	144392A2		1	KIT - idler, Includes: Ref. 24-28, LGP 64 inch gauge models

(1) 144392A2 IDLER KIT HAS HAS WEAR BARS AND SHIMS WITH 17 1/8" HOLE SPACING. 297032A1 IDLER KIT

For rubber track tensioner hydraulic circuit see figure 8-18.

IDLER ASSEMBLIES, R52404 IDLER ASSEMBLY, LGP 64 INCH GAUGE MODELS

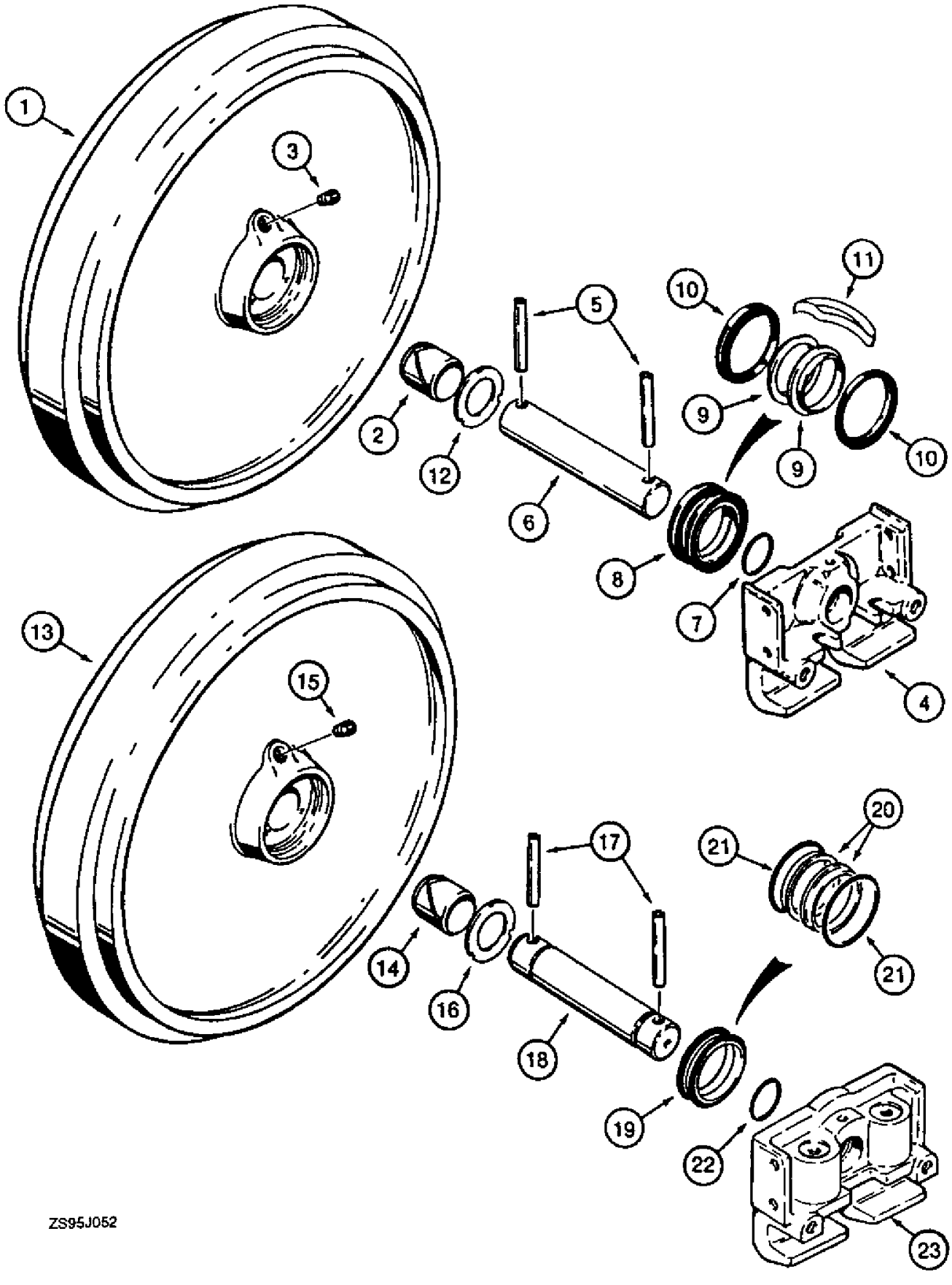


IDLER ASSEMBLIES, R52404 IDLER ASSEMBLY, LGP 64 INCH GAUGE MODELS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
	1	R52404		2	STEERING IDLER IDLER ASSEMBLY - track, see note below
		R50452		1	BUSHING HUB ASSEMBLY - with bushing
1		NSS		1	NOT SERVICED SEPARATELY HUB - idler
2		R24542		2	BUSHING - split
3		221-841		1	PLUG - hex socket, 1/4 inch PT
4		R52402		2	BRACKET - mounting
5		R50570		2	GROOVED PIN 1/2" x 3 1/2", Type A, Hardened Pin, Grooved, 1/2" x 3 1/2", Type A, Hardened
6		R46697		1	SHAFT - idler
7		238-5224		2	O-RING -224, 70 Duro, 1.734" ID x .139" Thk
8		R39273		2	SEAL ASSEMBLY - face
9		NSS		2	NOT SERVICED SEPARATELY RING - seal retaining
		D36826		1	SEAL KIT KIT - repair
10		NSS		2	NOT SERVICED SEPARATELY SEAL - rubber
11		NSS		1	NOT SERVICED SEPARATELY RETAINER - plastic
12		D35266		2	WASHER - thrust, idler
		R58710		2	FRONT IDLER IDLER ASSEMBLY - track, long track 53 inch gauge models
		R58709		1	FRONT IDLER HUB ASSEMBLY - with bushing, long track 53 inch gauge models
13		NSS		1	NOT SERVICED SEPARATELY HUB - idler, long track 53 inch gauge models
14		R24542		2	BUSHING - split, long track 53 inch gauge models
15		R33557		1	PLUG - hex socket, tapered, long track 53 inch gauge models
16		D35266		2	WASHER - thrust, idler, long track 53 inch gauge models

(1) Replace R52404 idler assembly with R58710 idler assembly and 144392A2 idler kit, see Figure 5-04 for idler kit

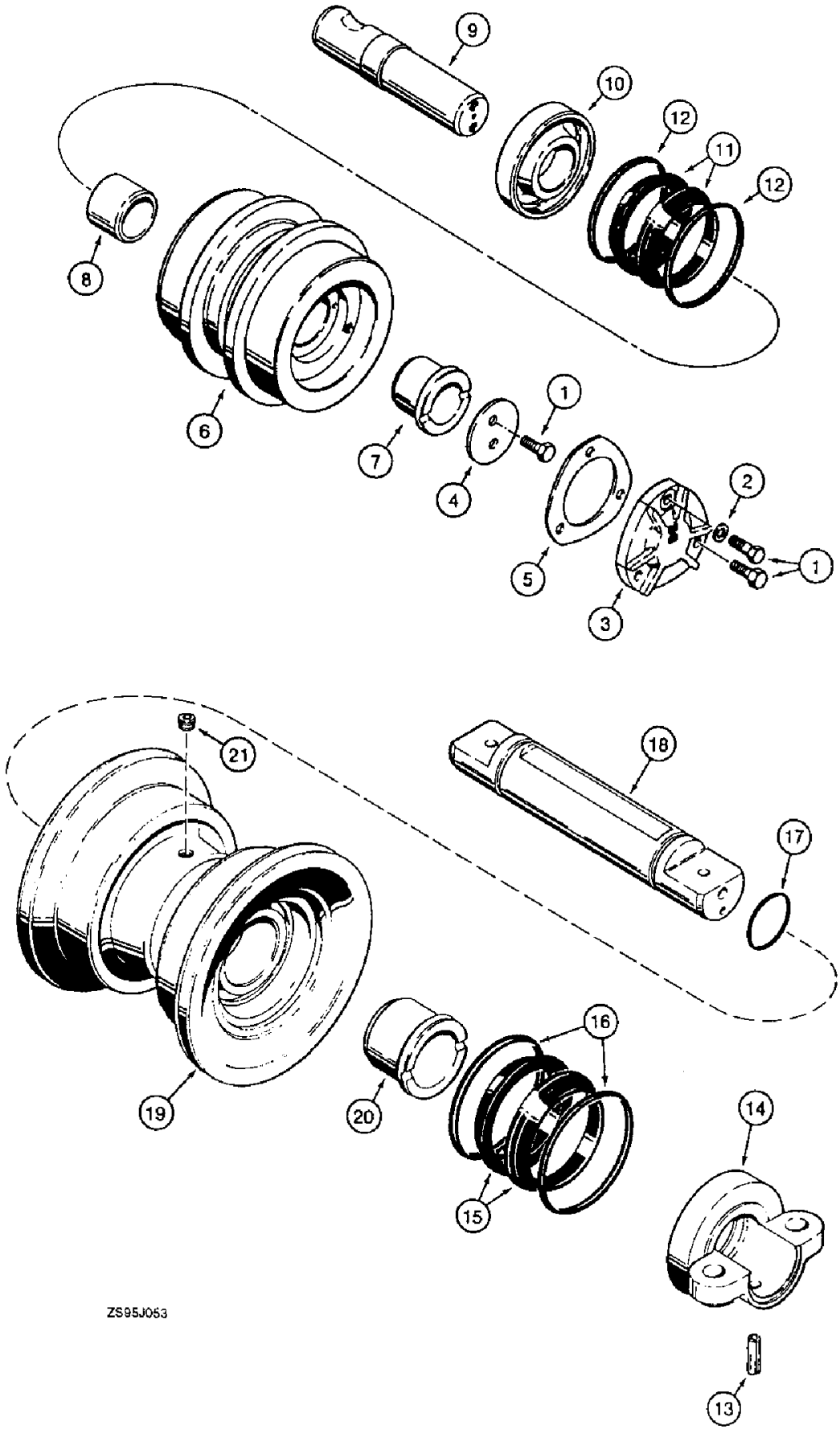
IDLER ASSEMBLIES, R52404 IDLER ASSEMBLY, LGP 64 INCH GAUGE MODELS



IDLER ASSEMBLIES, R52404 IDLER ASSEMBLY, LGP 64 INCH GAUGE MODELS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
17		R58807		2	GROOVED PIN 1/2" x 2 3/4", Type A, Hardened Pin, Grooved, , shaft retaining, long track 53 inch gauge models 1/2" x 2 3/4", Type A, Hardened
18		R58706		1	SHAFT - idler, long track 53 inch gauge models
19		R33607		1	SEAL ASSEMBLY - face, long track 53 inch gauge models
20		NSS		2	NOT SERVICED SEPARATELY SEAL - metal, long track 53 inch gauge models
21		N6847		2	O-RING 75mm ID x 8mm Width - face seal, long track 53 inch gauge models
22		238-5222		2	O-RING -222, 70 Duro, 1.484" ID x .139" Thk Long track 53 inch gauge models -222, 70 Duro, 1.484" ID x .139" Thk
23		R58707		2	BRACKET - mounting, long track 53 inch gauge models

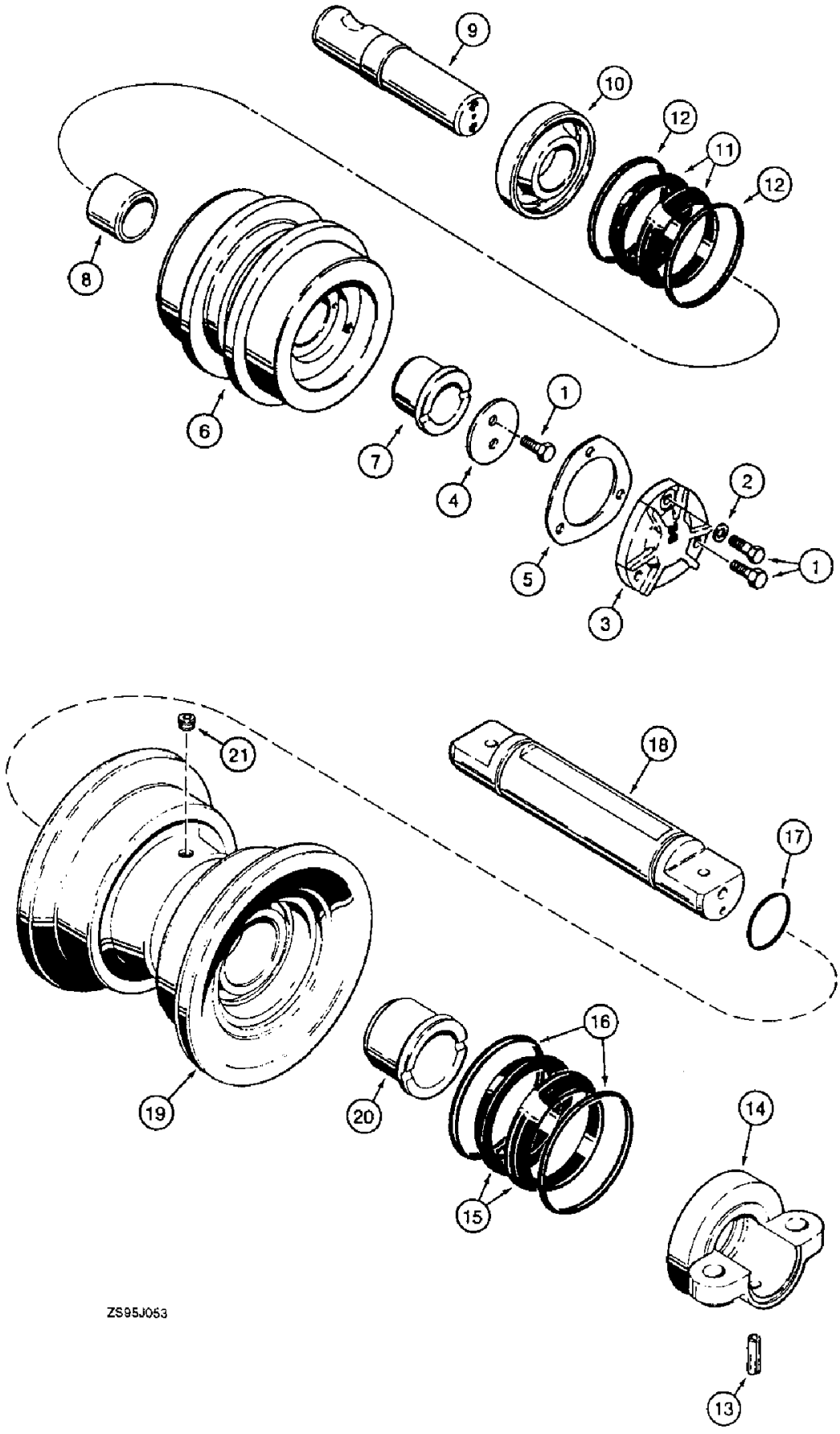
ROLLER ASSEMBLIES, TRACK CARRIER ROLLER ASSEMBLY



ROLLER ASSEMBLIES, TRACK CARRIER ROLLER ASSEMBLY

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		R33965		2	ROLLER ASSEMBLY - carrier
1		614-10020		5	BOLT Hex, M10 x 20, 8.8, Full Thd
2		D32117		1	COPPER WASHER WASHER, COPPER
3		R33959		1	CYLINDER END CAP CAP - end carrier roller
4		R33960		1	PLATE - shaft retainer
5		R33964		1	GASKET - end cover
		R33967		1	CARRIER HUB ASSEMBLY - carrier roller
6		NSS		1	NOT SERVICED SEPARATELY HUB - carrier roller
7		R33951		1	BUSHING - carrier roller, with flange
8		R33958		1	BUSHING - carrier roller, without flange
		R33969		1	SHAFT ASSEMBLY - carrier roller
9		NSS		1	NOT SERVICED SEPARATELY SHAFT - carrier roller
10		R33962		1	RETAINER - seal
		R33607		2	SEAL ASSEMBLY - face
11		NSS		2	NOT SERVICED SEPARATELY RING - seal
12		N6847		2	O-RING 75mm ID x 8mm Width - face seal
		R57357		12	TRACK ROLLER ROLLER ASSEMBLY - track
13		R33570		2	PIN - roll, bracket retaining, track roller assembly
14		R33568		2	BRACKET - track roller mounting and shaft support
		S113075		2	SEAL - oil, track roller assembly
15		NSS		2	NOT SERVICED SEPARATELY RING - seal, track roller assembly
16		NSS		2	NOT SERVICED SEPARATELY O-RING - face seal, track roller assembly
17		238-5224		2	O-RING -224, 70 Duro, 1.734" ID x .139" Thk Track roller assembly -224, 70 Duro, 1.734" ID x .139" Thk
18		R33569		1	SHAFT - track roller assembly

ROLLER ASSEMBLIES, TRACK CARRIER ROLLER ASSEMBLY



ROLLER ASSEMBLIES, TRACK CARRIER ROLLER ASSEMBLY

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		R57360		1	ROLLER ASSY. ROLLER ASSEMBLY - track roller
19		NSS		1	NOT SERVICED SEPARATELY HUB - track roller assembly
20		R33556		2	BUSHING - flanged, hub, track roller assembly
21		R33557		1	PLUG - hex socket, hub, track roller assembly

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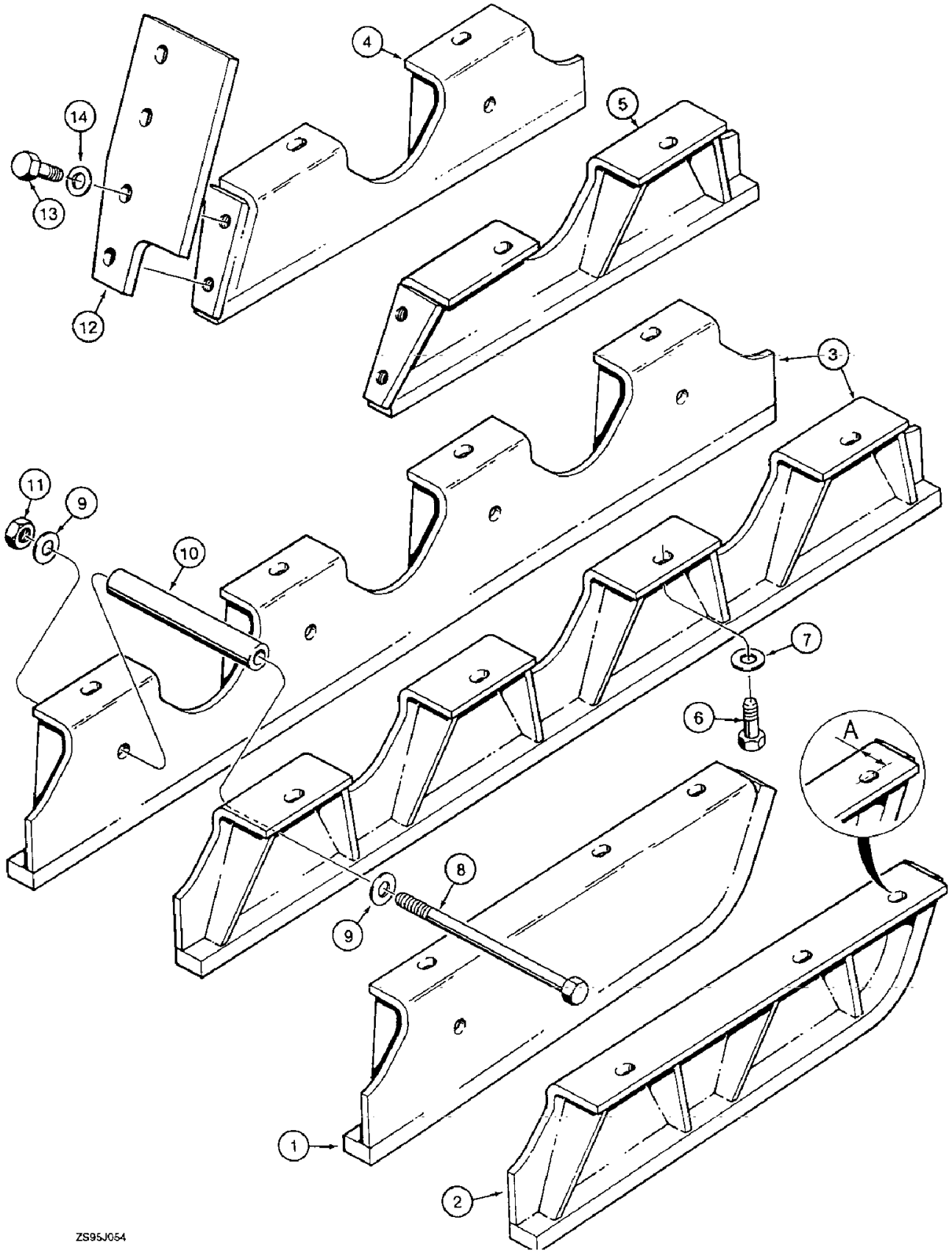
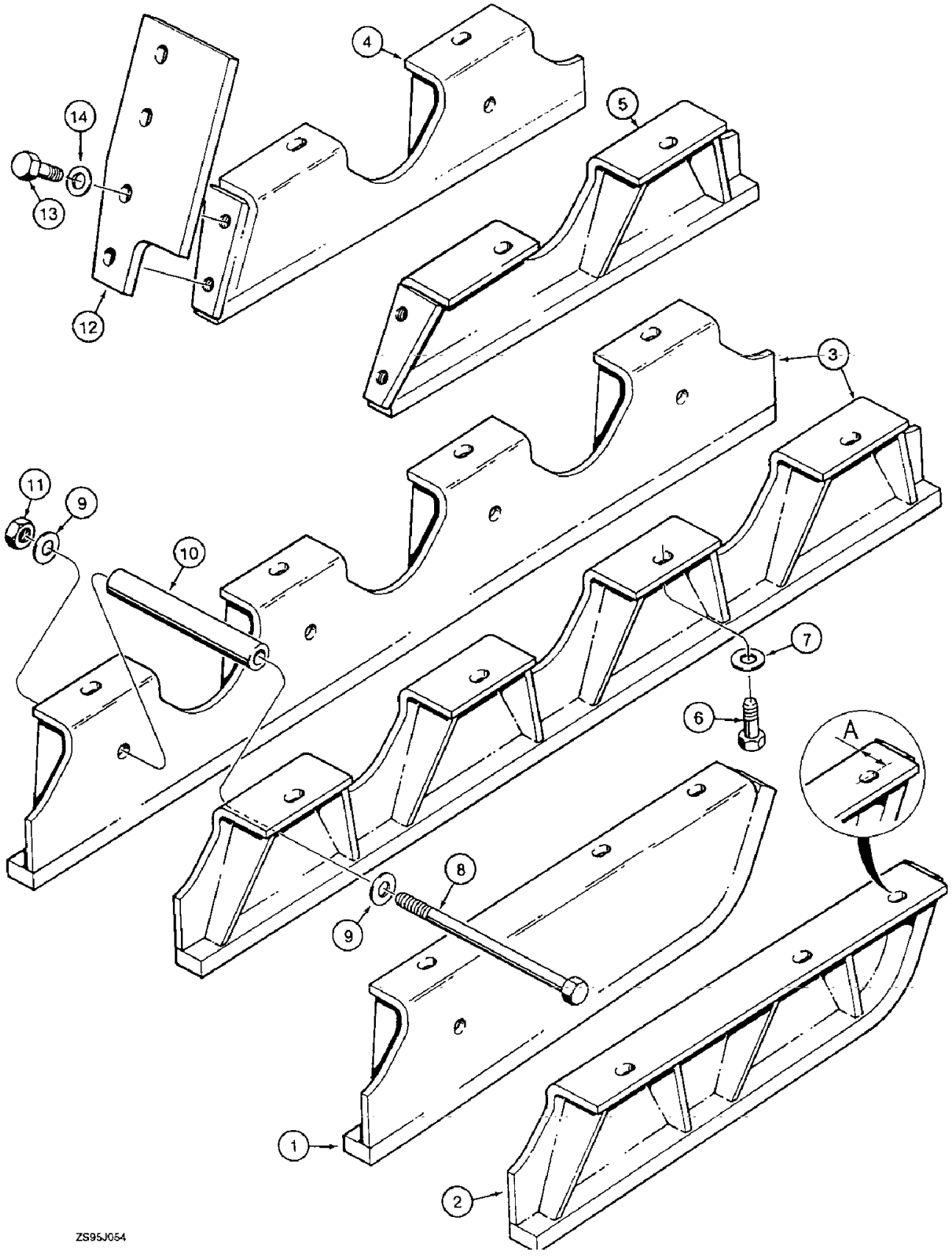
TRACK GUARDS, TRACK GUARDS WITH \XD2 A\XD3 MEASURE 38.1 MM,



TRACK GUARDS, TRACK GUARDS WITH \XD2 A\XD3 MEASURE 38.1 MM,

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58387		2	GUIDE GUARD - track, front, left-hand
2		R58386		2	GUIDE GUARD - track, front, right-hand
3		R55612		4	GUARD - track, center
4		R47465		2	GUARD - track, rear, left-hand
5		R47466		2	GUARD - track, rear, right-hand
6		106-9820		20	LOCK BOLT Locking, 1/2"-13 x 1 1/4", G5, Full Thd BOLT, Locking, 1/2"-13 x 1 1/4", G5, Full Thd
7		496-21053		20	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened
8		413-8136		4	BOLT Hex, 1/2"-13 x 8 1/2", G5 - hex, 1/2 NC x 8-1/2 inch
9		496-21053		20	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened
10		R36665		4	GUARD SPACER - track guards 7 inch (178 mm) long
11		231-4218		4	LOCK NUT 1/2"-13, GB NUT - hex, self-locking, 1/2 inch NC
12		R57458		4	COVER GUARD - rear, sprocket
13		106-9820		16	LOCK BOLT Locking, 1/2"-13 x 1 1/4", G5, Full Thd BOLT, Locking, 1/2"-13 x 1 1/4", G5, Full Thd
14		496-21053		16	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened
1		141195A1		2	GUARD - track, front, left-hand, with \xd2 A\xd3 measure 35.1mm
2		141194A1		2	GUARD - track, front, right-hand, with \xd2 A\xd3 measure 35.1 mm
3		141196A1		4	GUARD - track, center, with \xd2 A\xd3 measure 35.1 mm
4		141198A1		2	GUARD - track, rear, left-hand, with \xd2 A\xd3 measure 35.1 mm
5		141197A1		2	GUARD - track, rear, right-hand, with \xd2 A\xd3 measure 35.1 mm

TRACK GUARDS, TRACK GUARDS WITH \XD2 A\XD3 MEASURE 38.1 MM,



TRACK GUARDS, TRACK GUARDS WITH \XD2 A\XD3 MEASURE 38.1 MM,

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
6		106-9820		20	LOCK BOLT Locking, 1/2"-13 x 1 1/4", G5, Full Thd BOLT, Locking, 1/2"-13 x 1 1/4", G5, Full Thd, Track guards with \xd2 A\xd3 measure 35.1 mm
7		496-21053		20	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened, Track guards with \xd2 A\xd3 measure 35.1 mm
8		413-12144		4	BOLT Hex, 3/4"-10 x 9", G5 - hex, 3/4 NC x 9 inch, track guards \xd2 A\xd3 measure 35.1 mm
9		496-21053		20	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened, Track guards \xd2 A\xd3 measure 35.1 mm
10		141188A1		4	SPACER - track guards 7-1/4 inch (184 mm) long, with \xd2 A\xd3 measure 35.1 mm
11		231-41112		4	LOCK NUT 3/4"-10, GB NUT - hex, self-locking, 3/4 inch NC, track guards with \xd2 A\xd3 measure 35.1 mm
12		R57458		4	COVER GUARD - rear, sprocket, track with \xd2 A\xd3 measure 35.1 mm
13		106-9820		16	LOCK BOLT Locking, 1/2"-13 x 1 1/4", G5, Full Thd BOLT, Locking, 1/2"-13 x 1 1/4", G5, Full Thd, Track guards with \xd2 A\xd3 measure 35.1 mm
14		496-21053		16	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened, Track guards with \xd2 A\xd3 measure 35.1 mm

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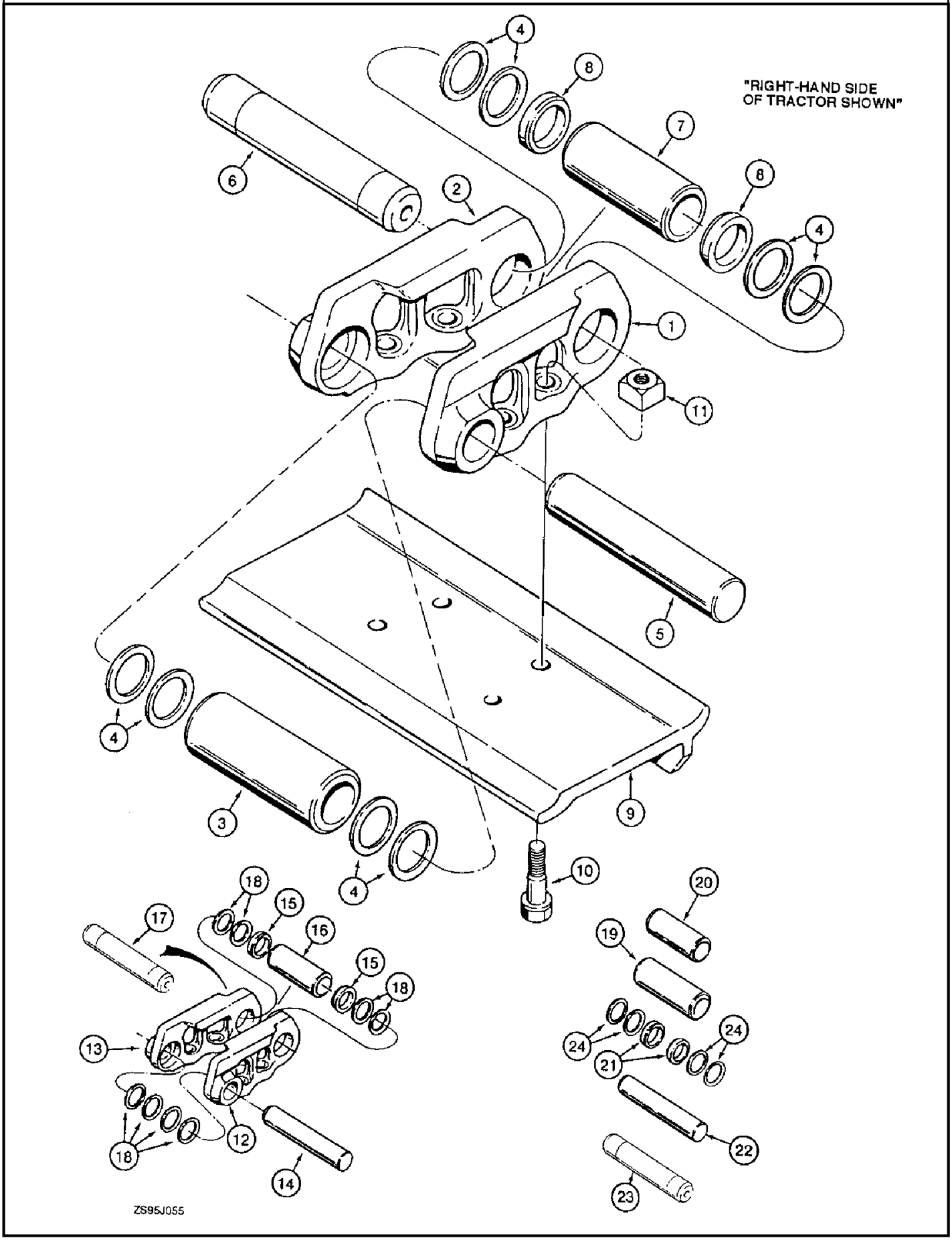
SEALED TRACK CHAIN, IF USED

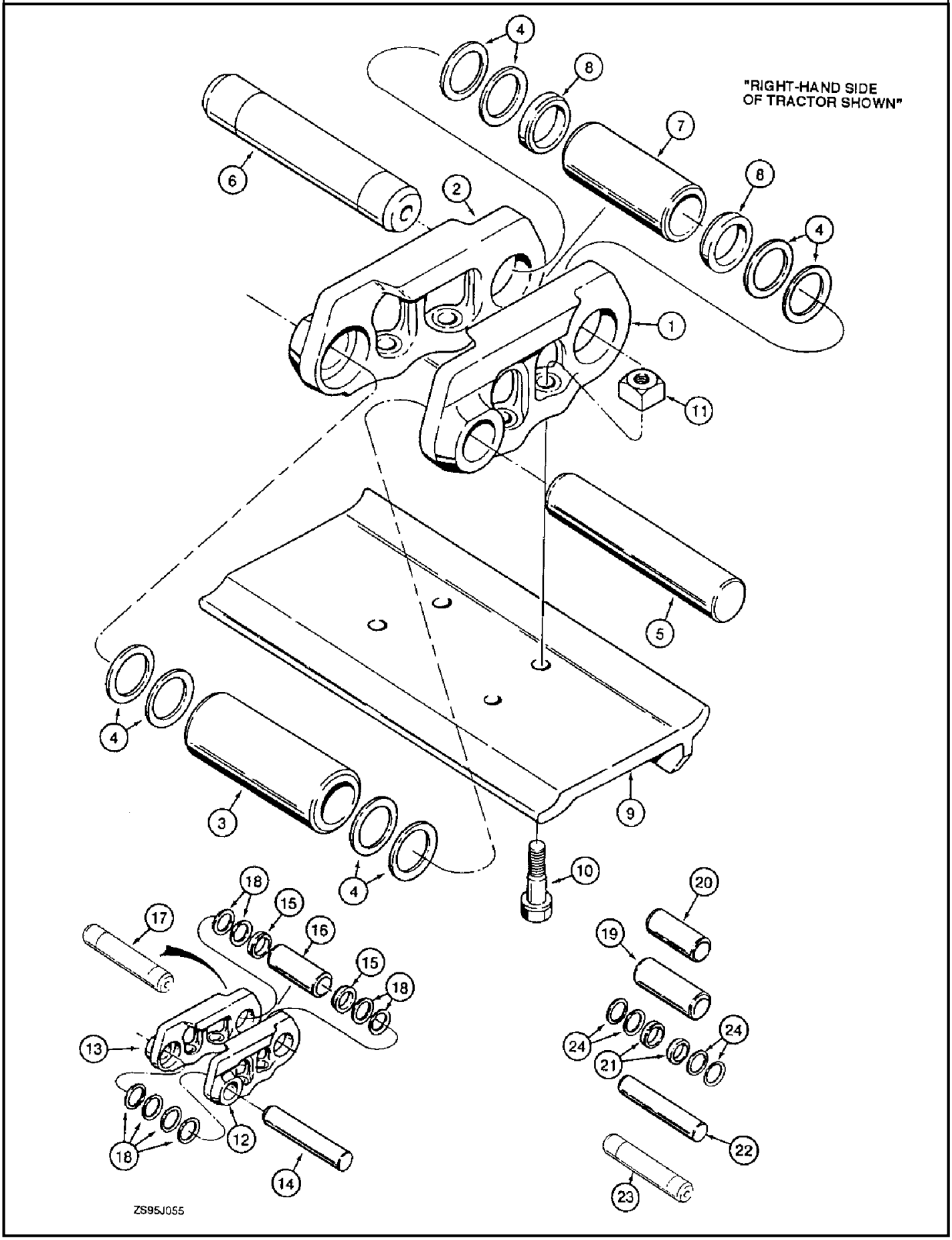


SEALED TRACK CHAIN, IF USED

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		R57371		2	CHAIN (CE) CHAIN ASSEMBLY - 37 unit
1		R57404		37	CHAIN LINK LINK, CHAIN, Track, RH
2		R57403		37	CHAIN LINK LINK, CHAIN, Track, LH
3		R57378		36	BUSHING - link, 4-3/4 inch long
4		R52291		148	SEAL - Belleville spring
5		R57367		36	PIN - 1-1/8 inch (29 mm) diameter
6		R57366		1	PIN - master link, order oversized R57412 pin (ref. 23)
7		R57379		1	BUSHING - master link, 4 inch long
8		R57411		2	SPACER - master bushing
9		R57417		74	PLATE SHOE - track, closed center, single grouser,16 inch (406 mm)
10		R57374		296	SCREW BOLT - hex, special, 9/16 NF x 1-25/32 inch
11		R57375		296	SQUARE NUT - square, special, 9/16 inch NF
		R57414		1	CHAIN (AG) KIT - chain unit, includes instruction sheet, (includes standard and master track pins)
12		R57404		1	CHAIN LINK LINK, CHAIN, RH, Unit kit (Incl. standard and master track pins)
13		R57403		1	CHAIN LINK LINK, CHAIN, Track, LH, Unit Kit (Incl. standard and master track pins)
14		R57367		2	PIN - 1-1/8 inch (29 mm) diameter, standard, chain unit kit (includes standard and master track pins)
15		R57411		2	SPACER - master bushing, used with master pin, chain unit kit (includes standard and master track pins)
16		R57379		1	BUSHING - master link, 4 inch long, chain unit kit (includes standard and master track pin)
17		R57366		1	PIN - master link, order oversized R57412 pin (ref. 23), chain unit kit (includes standard and master track pins)

****NOTE: For Case Lubricated Track chains, see Figures 5-14 and 5-16.**

SEALED TRACK CHAIN, IF USED

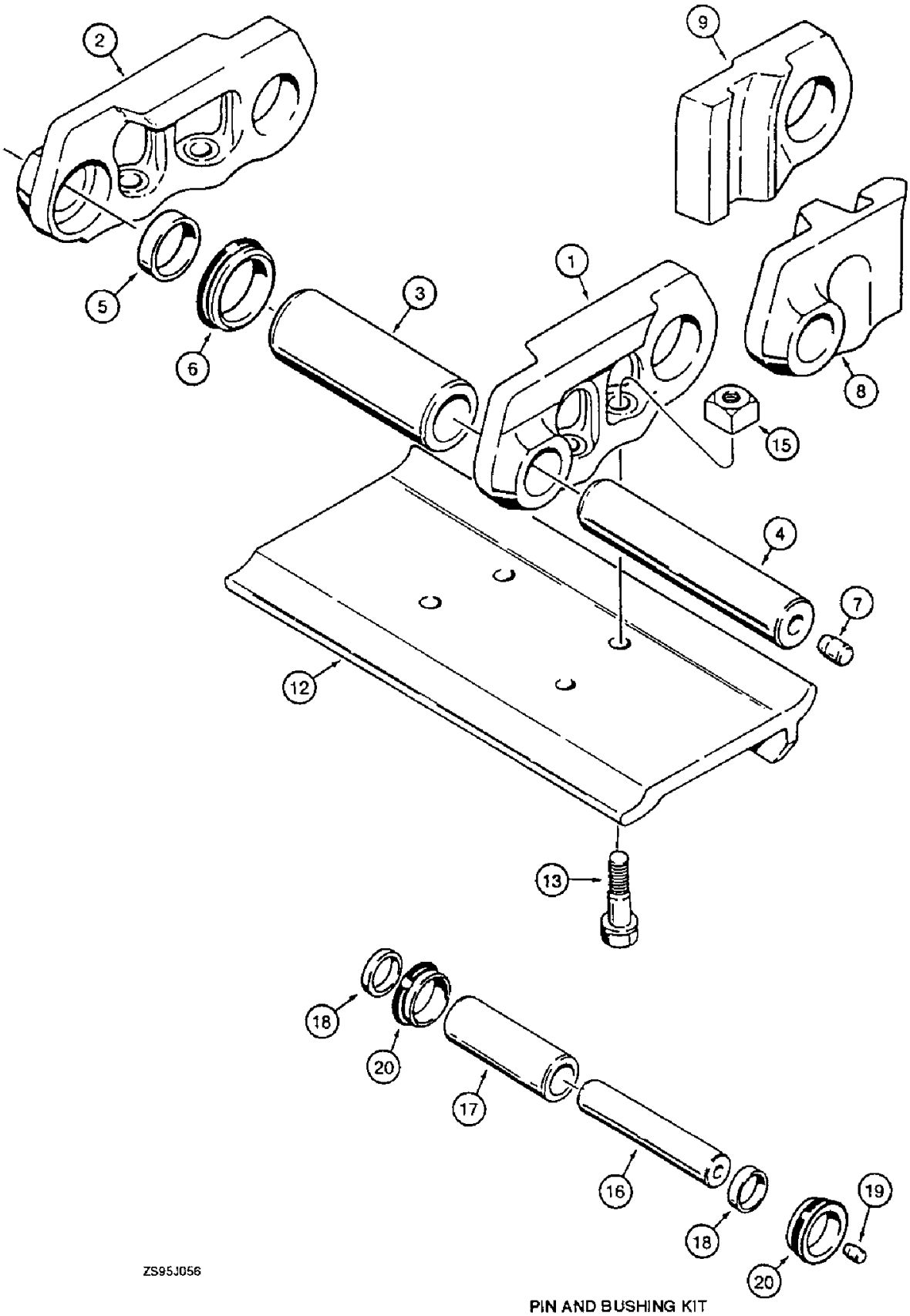


SEALED TRACK CHAIN, IF USED

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
18		R52291		8	SEAL - Belleville spring, bushing, chain unit kit (includes standard and master track pins)
		R57413		1	PIN KIT - pin and bushing, includes instruction sheet, services complete track chain for both sides of tractor
19		R57378		72	BUSHING - link, 4-3/4 inch long, pin kit
20		R57379		2	BUSHING - master link, 4 inch long, pin kit
21		R57411		4	SPACER - master bushing and pin kit
22		R57367		72	PIN - 1-1/8 inch (29 mm) diameter, pin and bushing kit
23		R57412		2	PIN - Master, 0.08 inch oversized, pin and bushing kit
24		R52291		296	SEAL - Belleville spring, bushing and pin kit

****NOTE: For Case Lubricated Track chains, see Figures 5-14 and 5-16.**

CASE LUBRICATED TRACK CHAIN, IF USED, EACH MASTER LINK HAS ONE BOLT HOLE

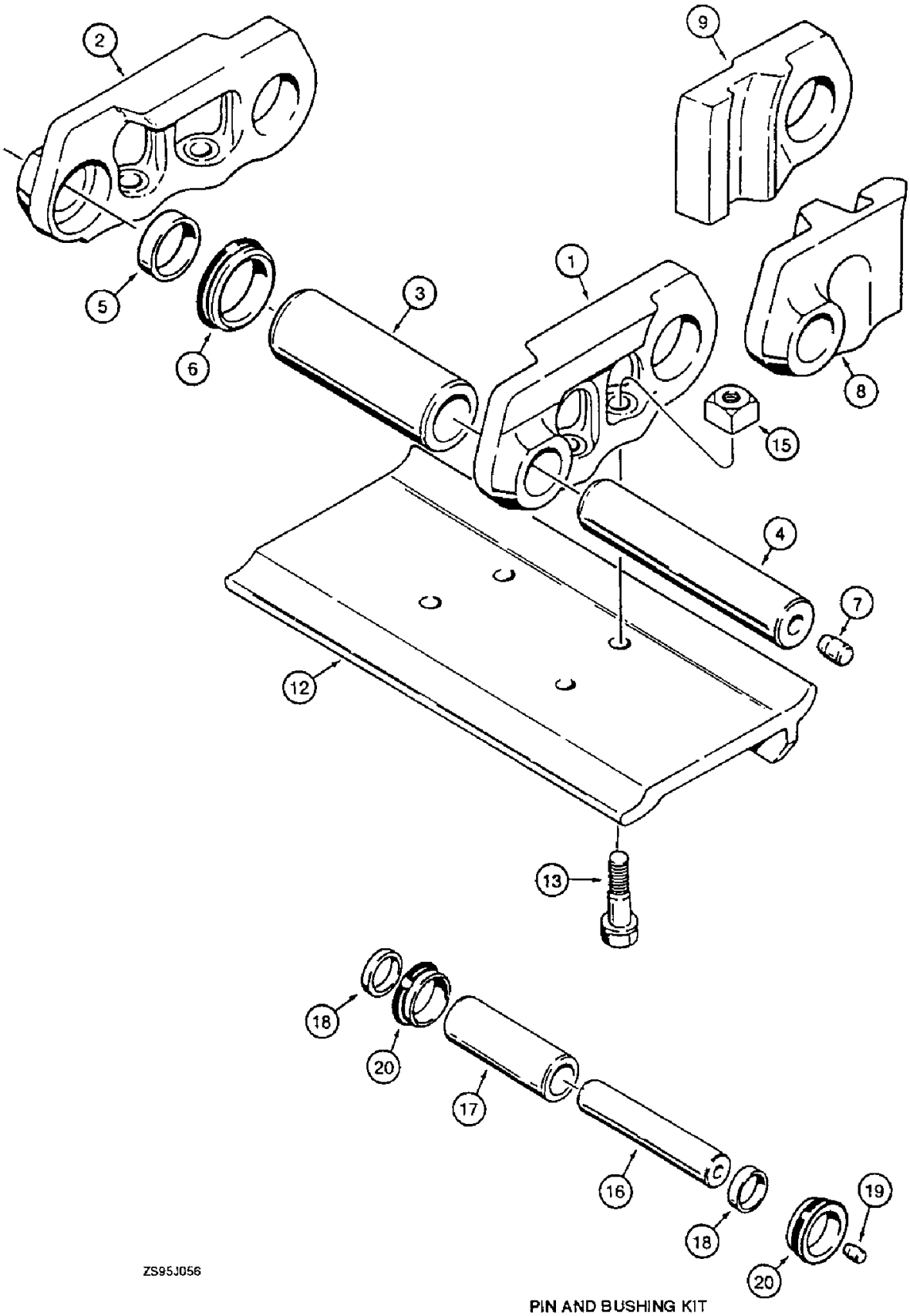


PIN AND BUSHING KIT

CASE LUBRICATED TRACK CHAIN, IF USED, EACH MASTER LINK HAS ONE BOLT HOLE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		R57372		2	CHAIN (CE) CHAIN ASSEMBLY - 37 unit
1		R57404		36	CHAIN LINK LINK, CHAIN, Track, RH
2		R57403		36	CHAIN LINK LINK, CHAIN, Track, LH
3		R57369		37	BUSHING - track pin, 1-7/8 inch (47 mm) OD
4		R57368		37	PIN - track
5		R57377		74	RING SPACER - seal
6		R57370		74	SEAL SEAL - track pin
7		R54334		37	PLUG - track pin
		R57406		1	CHAIN LINK LINK ASSEMBLY - master, right-hand
8		NSS		1	NOT SERVICED SEPARATELY LINK - track, master, fits over track pin on outside of regular track link, right-hand
9		NSS		1	NOT SERVICED SEPARATELY LINK - track, master, fits over bushing on inside of regular track link, right-hand
		R57405		1	CHAIN LINK LINK ASSEMBLY - master, left-hand
10		NSS		1	NOT SERVICED SEPARATELY LINK - track, master, fits over track pin on outside of regular track link, left-hand, not shown
11		NSS		1	NOT SERVICED SEPARATELY LINK - track, master, fits over bushing on inside of regular tracklink, left-hand, not shown
12		R57417		74	PLATE SHOE - track, closed center, single grouser, 16 inch (406 mm), if used
12		R57876		74	PLATE SHOE - track, closed center, single grouser, 20 inch (508 mm), if used
12		R57418		74	TRACK SHOE SHOE - track, closed center, single grouser, 28 inch (711 mm), if used

CASE LUBRICATED TRACK CHAIN, IF USED, EACH MASTER LINK HAS ONE BOLT HOLE

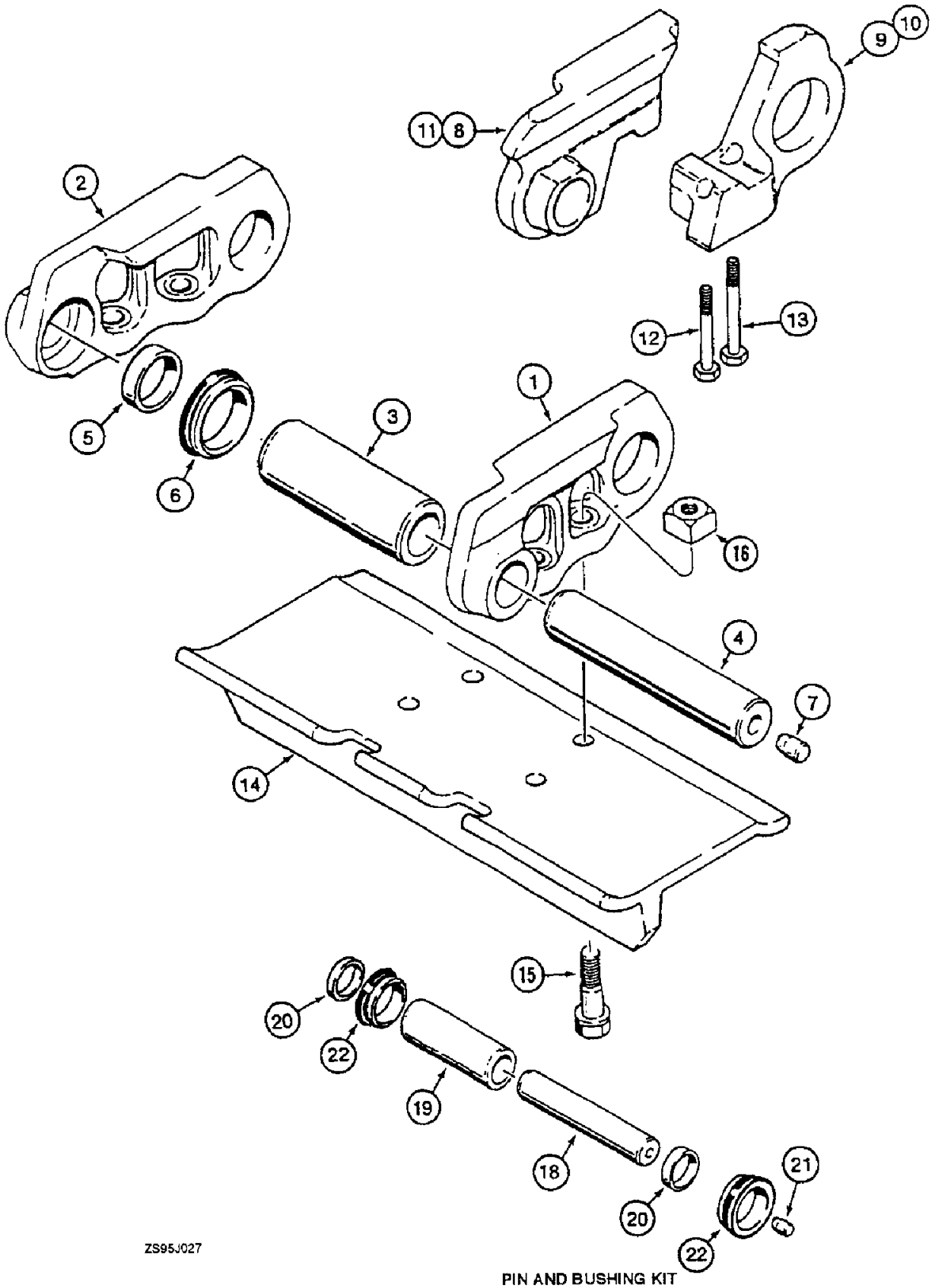


PIN AND BUSHING KIT

CASE LUBRICATED TRACK CHAIN, IF USED, EACH MASTER LINK HAS ONE BOLT HOLE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
13		R57374		296	SCREW BOLT - hex, special, 9/16 NF x 1-25/32 inch
15		R57375		288	SQUARE NUT - square, special, 9/16 inch NF, square, not used on master link bolts
		R57415		1	PIN KIT - pin and bushing, includes instruction sheet, services complete track chain for both sides of tractor
16		R57368		74	PIN - track, and bushing kit
17		R57369		74	BUSHING - track pin, 1-7/8 inch (47 mm) OD
18		R57377		148	RING SPACER - seal, pin and bushing kit
19		R54334		74	PLUG - track pin and bushing kit
20		R57370		148	SEAL SEAL - track pin and bushing kit
21		345-140		UAR	SEALANT ADHESIVE - rubber, Scotch Grip No. 847, 1 pint can, for link pin bores, not shown, pin and bushing kit

CASE LUBRICATED TRACK CHAIN, IF USED, EACH MASTER LINK HAS TWO BOLT HOLES

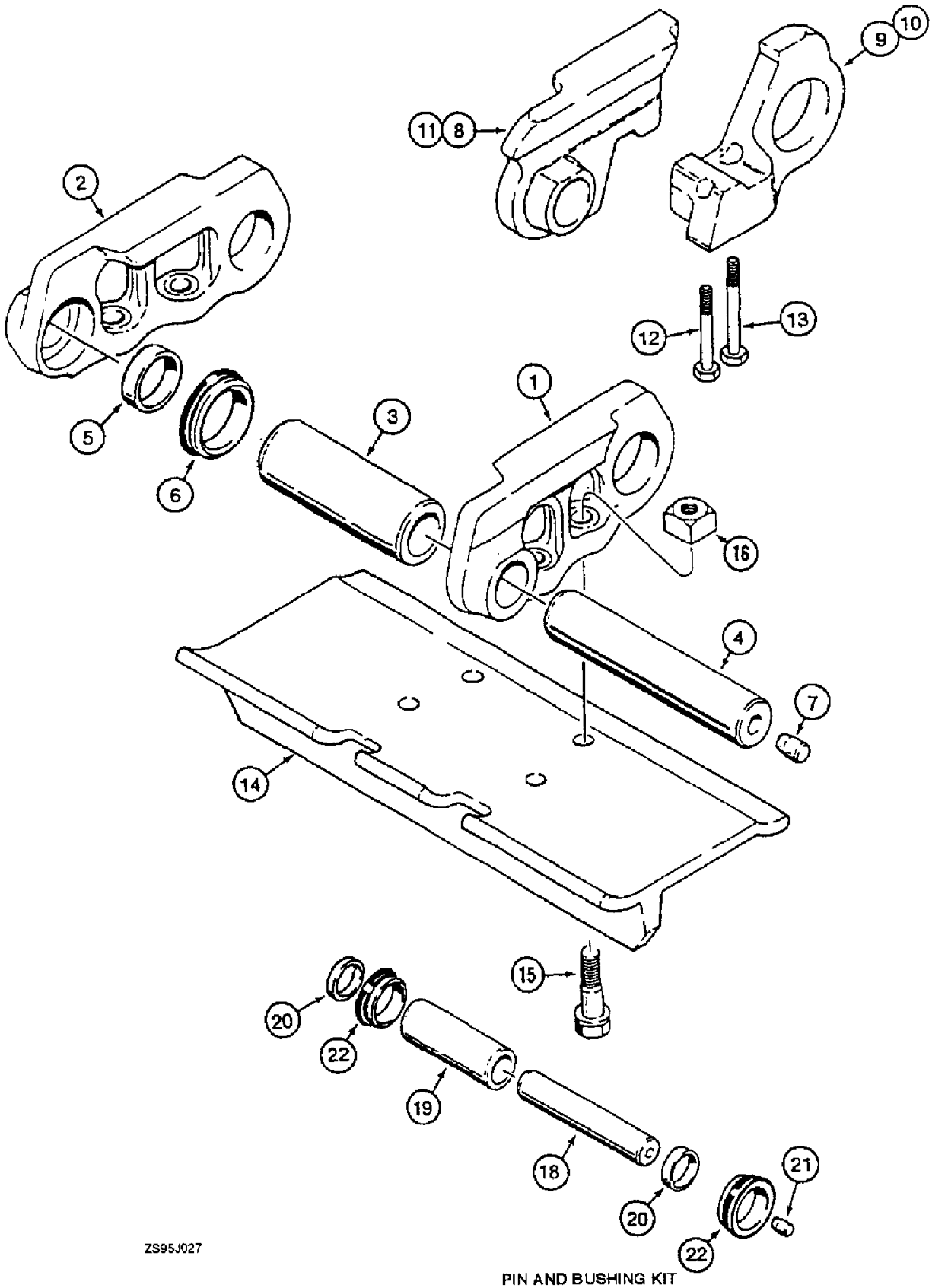


PIN AND BUSHING KIT

CASE LUBRICATED TRACK CHAIN, IF USED, EACH MASTER LINK HAS TWO BOLT HOLES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		130345A1		2	TRACK CHAIN CHAIN ASSEMBLY - 37 unit
1		R57404		36	CHAIN LINK LINK, CHAIN, Track, RH
2		R57403		36	CHAIN LINK LINK, CHAIN, Track, LH
3		R57369		37	BUSHING - track pin, 1-7/8 inch (47 mm) OD
4		R57368		37	PIN - track
5		R57377		74	RING SPACER - seal
6		R57370		74	SEAL SEAL - track pin
7		R54334		37	PLUG - track pin
		130344A1		1	LINK ASSEMBLY - master, right-hand
8		NSS		1	NOT SERVICED SEPARATELY LINK - track, master, fits over track pin on outside of regular track link, right-hand
9		NSS		1	NOT SERVICED SEPARATELY LINK - track, master, fits over bushing on inside of regular track link, right-hand
		130343A1		1	LINK ASSEMBLY - master, left-hand
10		NSS		1	NOT SERVICED SEPARATELY LINK - track, master, fits over track pin on outside of regular track link, left-hand, not shown
11		NSS		1	NOT SERVICED SEPARATELY LINK - track, master, fits over bushing on inside of regular track link, left-hand, not shown
12		135984A1			BOLT - special, 54 mm long, used on master link only
13		133796A1			BOLT - special, 73 mm long, used on master link only
14		R57417		74	PLATE SHOE - track, closed center, single grouser, 16 inch (406 mm), if used
14		R57876		74	PLATE SHOE - track, closed center, single grouser, 20 inch (508 mm), if used

CASE LUBRICATED TRACK CHAIN, IF USED, EACH MASTER LINK HAS TWO BOLT HOLES



PIN AND BUSHING KIT

CASE LUBRICATED TRACK CHAIN, IF USED, EACH MASTER LINK HAS TWO BOLT HOLES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
14		R57418		74	TRACK SHOE SHOE - track, closed center, single grouser, 28 inch (711 mm), if used
15		R57374		296	SCREW BOLT - hex, special, 9/16 NF x 1-25/32 inch
16		R57375		288	SQUARE NUT - square, special, 9/16 inch NF, not used on master link bolts
		R57415		1	PIN KIT - pin and bushing, includes instruction sheet, services complete track chain for both sides of tractor
18		R57368		74	PIN - track, and bushing kit
19		R57369		74	BUSHING - track pin, 1-7/8 inch (47 mm) OD, and bushing kit
20		R57377		148	RING SPACER - seal, pin and bushing kit
21		R54334		74	PLUG - track pin and bushing kit
22		R57370		148	SEAL SEAL - track pin and bushing kit
		345-140		UAR	SEALANT ADHESIVE - rubber, Scotch Grip No. 847, 1 pint can, for link pin bores, not shown, pin and bushing kit

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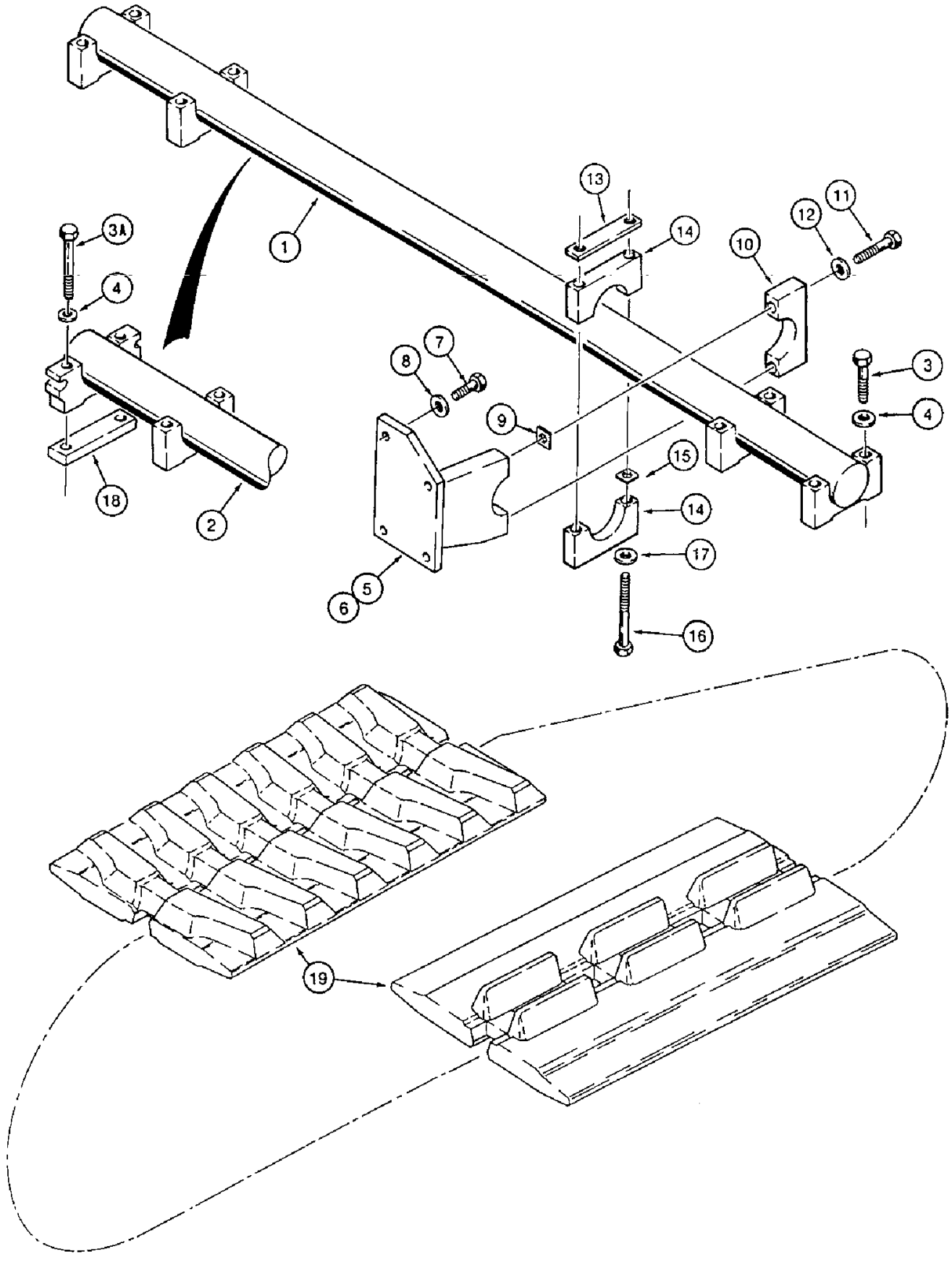
REAR PIVOT SHAFT AND RUBBER TRACK, REAR PIVOT SHAFT



REAR PIVOT SHAFT AND RUBBER TRACK, REAR PIVOT SHAFT

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R53785		1	SHAFT - pivot, LGP 64 inch gauge models, 73-1/4 inch (1861 mm) overall mounting length
2		100771A1		1	BAR ASSY. SHAFT - pivot, long track 53 inch gauge models with rubber or steel track, 62-1/4 inch (1581 mm) overall mounting length
3		326-1264		8	BOLT Hex, 3/4"-10 x 4", G8
3A		326-1288		8	BOLT Hex, 3/4"-10 x 5 1/2", G8 Models with rubber track Hex, 3/4"-10 x 5 1/2", G8
4		D34666		8	WASHER - flat, special
5		R46896		1	SUPPORT BRACKET - pivot shaft to final drive housing, right-hand
6		R46897		1	SUPPORT BRACKET - pivot shaft to final drive housing, left-hand, not shown
7		113-2709		8	LOCK BOLT Locking, 3/8"-10 x 2 1/2", G8 BOLT - hex, 3/4 NC x 2-1/2 inch, grade 8, use with Loctite 242
8		T53681		8	WASHER - flat, 3/4 inch, special, hardened
9		R28516		2	SPACER - clamp, upper
10		D34663		2	CLAMP - front, pivot shaft
11		113-833		4	BOLT Locking, 7/8"-9 x 4", G5 - hex, 3/4 NC x 4 inch, use with Loctite 242
12		D34667		4	WASHER - special, hardened
13		D34722		2	BLOCK - tapped, clamp, top
14		D34663		4	CLAMP - to engine frame
15		R28516		2	SPACER - clamp, front
16		413-14120		4	BOLT Hex, 7/8"-9 x 7 1/2", G5 - hex, 7/8 NC x 7-1/2 inch
17		D34667		4	WASHER - flat, 7/8 inch, special, hardened
18		R58321		2	SPACER - pivot shaft, models with rubber track
19		118075A1		2	RUBBER TRACK - rubber

NOTE: Models with rubber track cannot be equipped with ripper attachment or final drive guards. See parts list figure 9-12 item 20.
NOTE: For rubber track tensioner hydraulic circuit, see figure 8-18.

SECTION INDEX

Power Train

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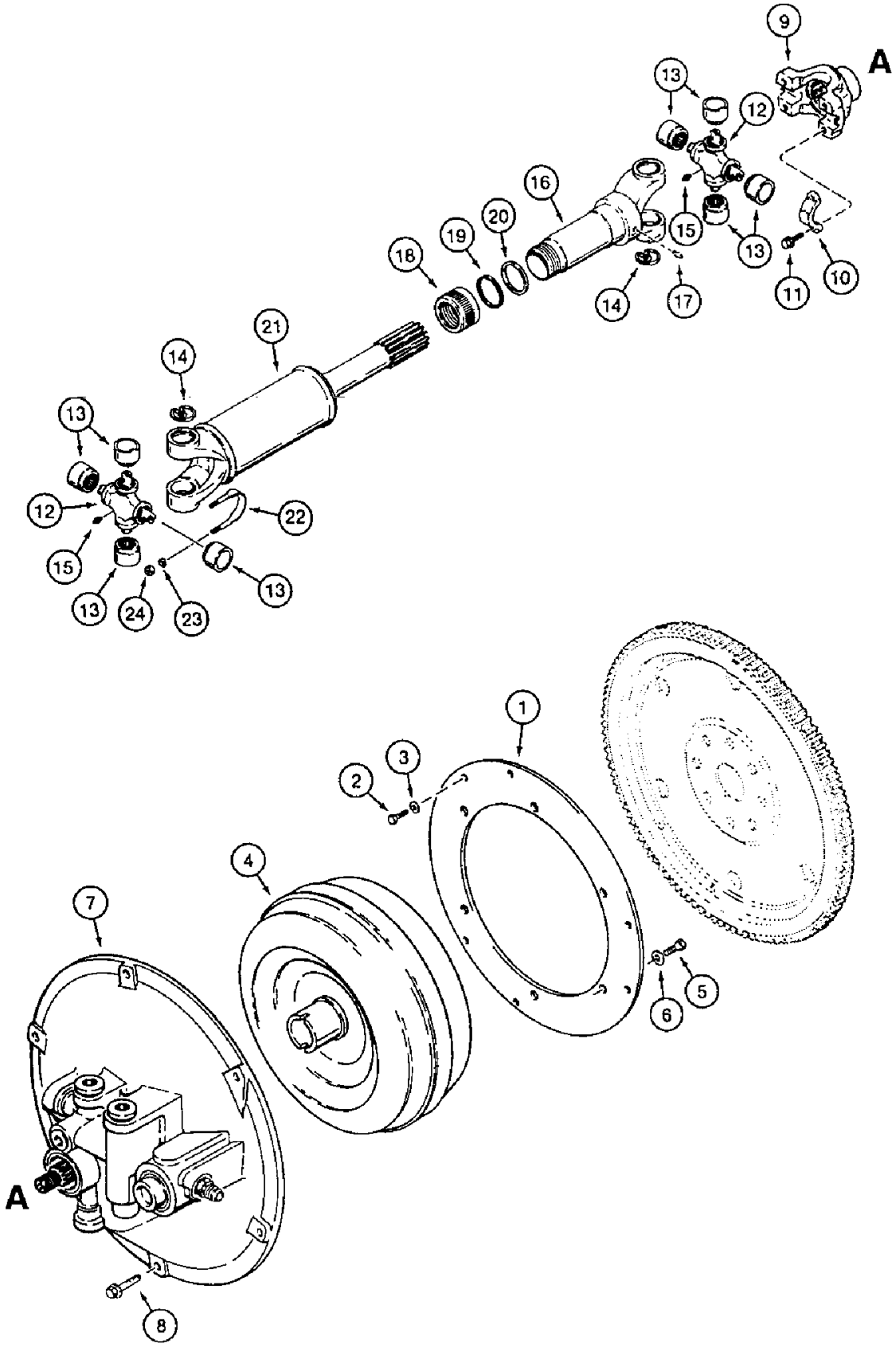
TORQUE CONVERTER, ADAPTER PLATE AND DRIVE SHAFT



TORQUE CONVERTER, ADAPTER PLATE AND DRIVE SHAFT

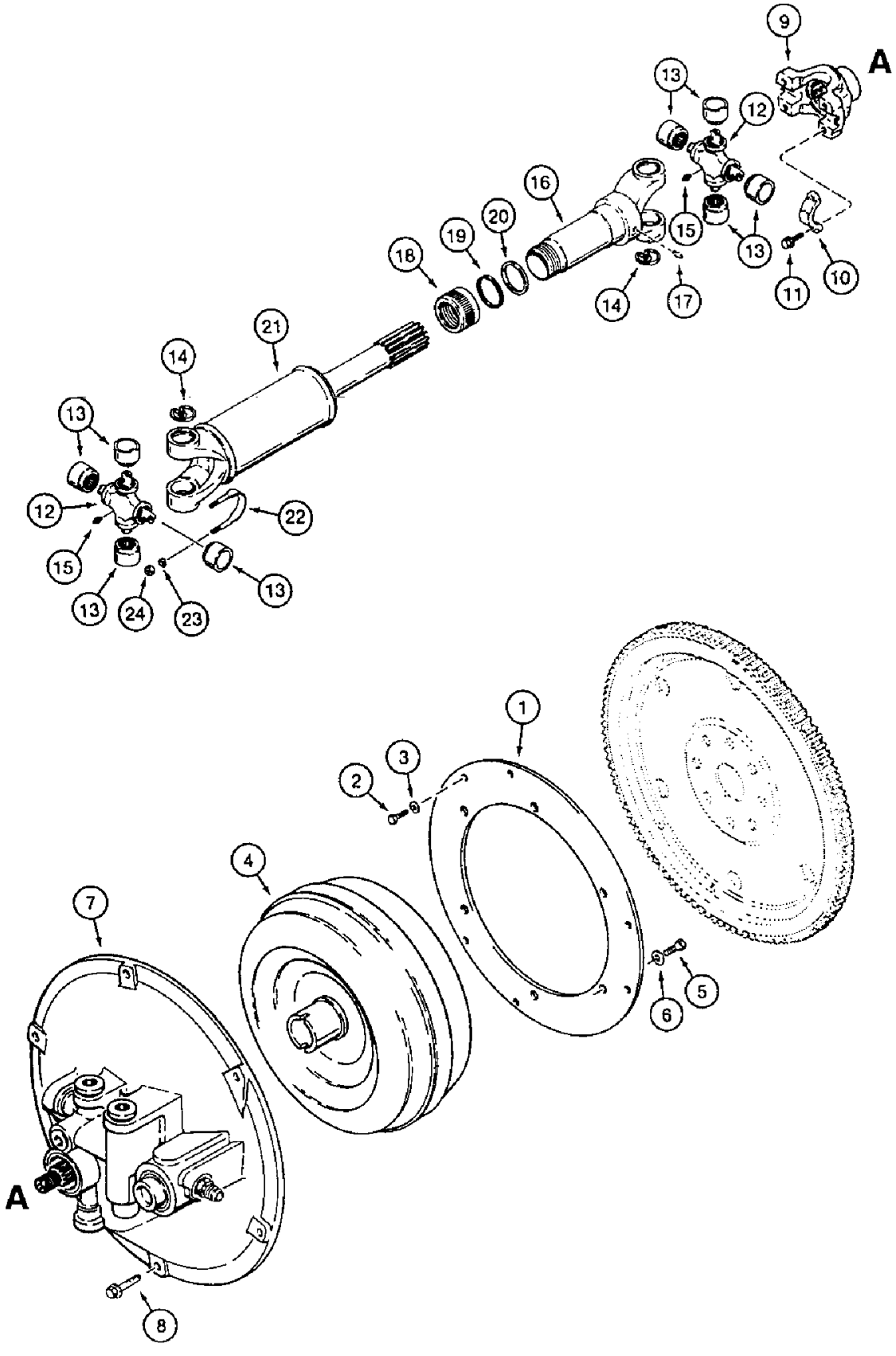
REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		A178706		1	PLATE PLATE - adapter, torque converter to flywheel plate
2		25978R1		6	BOLT Hex, 5/16"-24 x 5/8", G8, Full Thd BOLT - hex, 5/16 NF x 5/8 inch, grade 8, adapter plate to flywheel plate
3		A15672		6	WASHER WASHER - flat, hardened, special
4		1995137C1		1	CONVERTER CONVERTER ASSEMBLY - torque, component parts not serviced separately
		1995137C1R		1	REMAN-TORQUE CONVERT ER REMAN - Torque Converter, For N.A. Only
		1995137C1C		1	CORE-TORQUE CONVERTR CORE-TORQUE CONVERTER Return Number, For N.A. Only
5		614-10016		6	BOLT Hex, M10 x 16, 8.8, Full Thd BOLT, Hex, M10 x 16, 8.8, Full Thd
6		895-11010		6	WASHER M10 x 20 x 2 WASHER - flat, 11 x 21 x 2 mm
7		1348881C2		1	CONVERTER HOUSING ASSEMBLY - torque converter
8		R54620		6	SCREW BOLT - heavy hex flange, special
9		A159663		1	YOKE UNIVERSAL JOINT YOKE YOKE - output shaft, for shaft assembly without permanent lubrication
9		1348826C1		1	CLEVIS YOKE - output shaft, for shaft assembly with permanent lubrication
10	1	D124146		2	CLAMP STRAP - bearing
10A	2	90-6682T1			CLAMP STRAP
11	1	D124151		4	BOLT special, 1/4 - 28 threads
11A	2	D137627			BOLT 5/16 - 24 threads
		R56762		1	STEERING SHAFT SHAFT ASSEMBLY - drive, without permanent lubrication, no longer used, order 109490A1

(1) USE WITH A159663 YOKE.

(2) USE WITH 1348826C1 YOKE

See figure 6-10 for transmission drive shaft mounting yoke.
IF REPLACING R56762 DRIVESHAFT WITH 109490A1 DRIVESHAFT, IT IS NOT NECESSARY TO REPLACE THE OUTPUT YOKE (REF.9) OR HARDWARE (REFS. 10 AND 11) TO INSTALL THE LATER DRIVESHAFT.
WHEN REPLACING THE DRIVESHAFT TO A 109490A1 YOU NEED TO USE YOKE WITH P/N A159663. THIS YOKE HAS A WIDTH OF 3 - 3/16"

TORQUE CONVERTER, ADAPTER PLATE AND DRIVE SHAFT

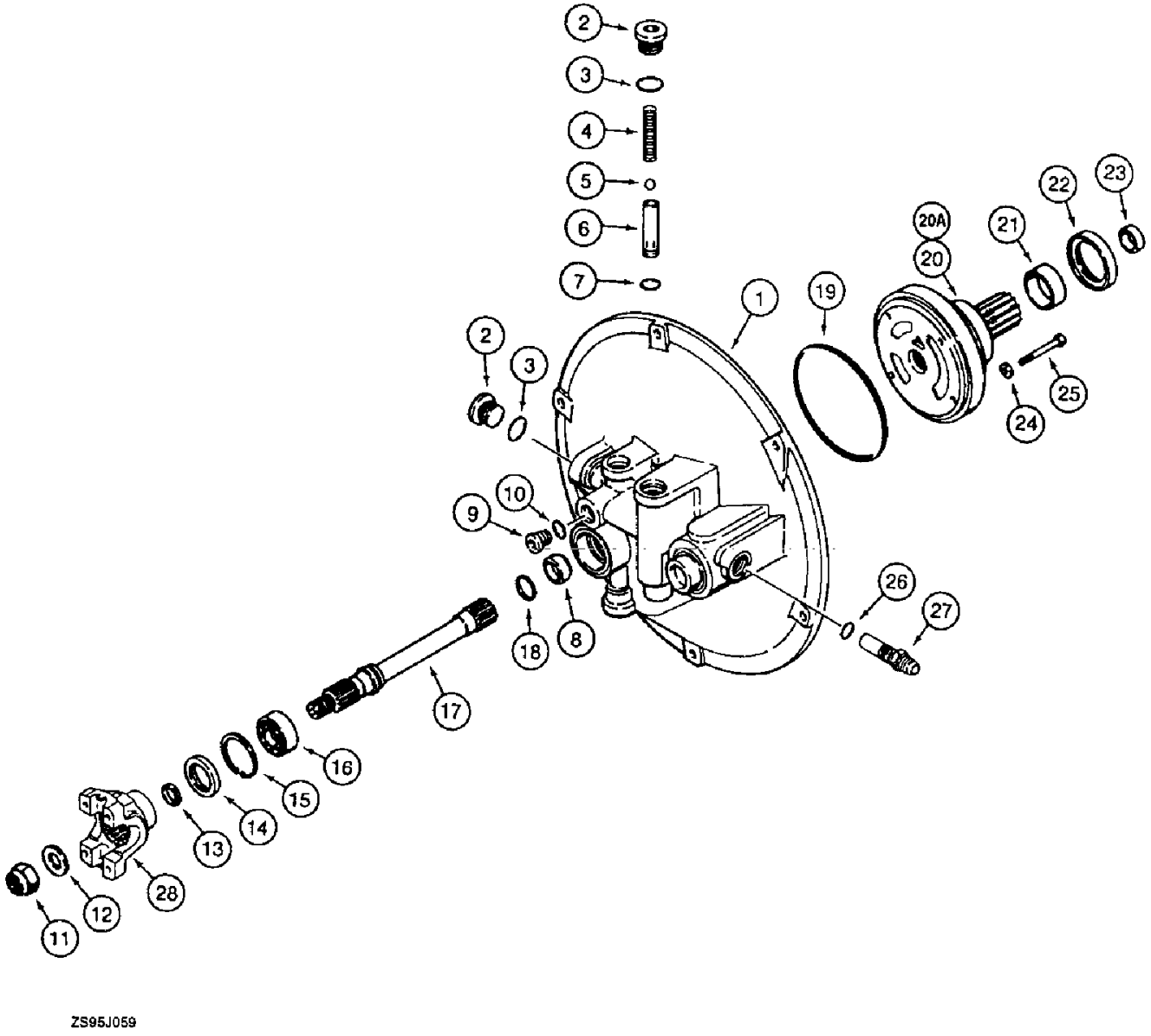


TORQUE CONVERTER, ADAPTER PLATE AND DRIVE SHAFT

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		109490A1		1	STEERING SHAFT SHAFT ASSEMBLY - drive, with permanent lubrication
		235981A1		2	KIT KIT - universal joint
12		NSS		1	NOT SERVICED SEPARATELY JOINT - universal, drive shaft
13		NSS		4	NOT SERVICED SEPARATELY BEARING - universal joint
14		11256		4	RING RING - retaining, bearing, universal joint
15		219-10		1	LUBE NIPPLE 1/4"-28 NPT x .68" lg FITTING - grease, straight, 1/4-28 taper x 11/16 inch, if used
16		S301035		1	YOKE TUBE - yoke, torque converter end
17		219-10		1	LUBE NIPPLE 1/4"-28 NPT x .68" lg FITTING - grease, straight, 1/4-28 taper x 11/16 inch
18		H223875		1	CYLINDER END CAP CAP - dust
19		H223891		1	WASHER WASHER - special, steel
20		134381A1		1	RUBBER WASHER WASHER - special, cork
21		S301042		1	SHAFT YOKE - splined shaft, transmission end
		H183566		2	BOLT U-BOLT ASSEMBLY - special
22		NSS		1	NOT SERVICED SEPARATELY U-BOLT - special
23		492-11031		2	LOCK WASHER 5/16" WASHER, LOCK, 5/16"
24		425-115		2	NUT 5/16"-24, G5 NUT - hex, 5/16 inch NF

See figure 6-10 for transmission drive shaft mounting yoke.
IF REPLACING R56762 DRIVESHAFT WITH 109490A1 DRIVESHAFT, IT IS NOT NECESSARY TO REPLACE THE OUTPUT YOKE (REF.9) OR HARDWARE (REFS. 10 AND 11) TO INSTALL THE LATER DRIVESHAFT.
WHEN REPLACING THE DRIVESHAFT TO A 109490A1 YOU NEED TO USE YOKE WITH P/N A159663. THIS YOKE HAS A WIDTH OF 3 - 3/16"

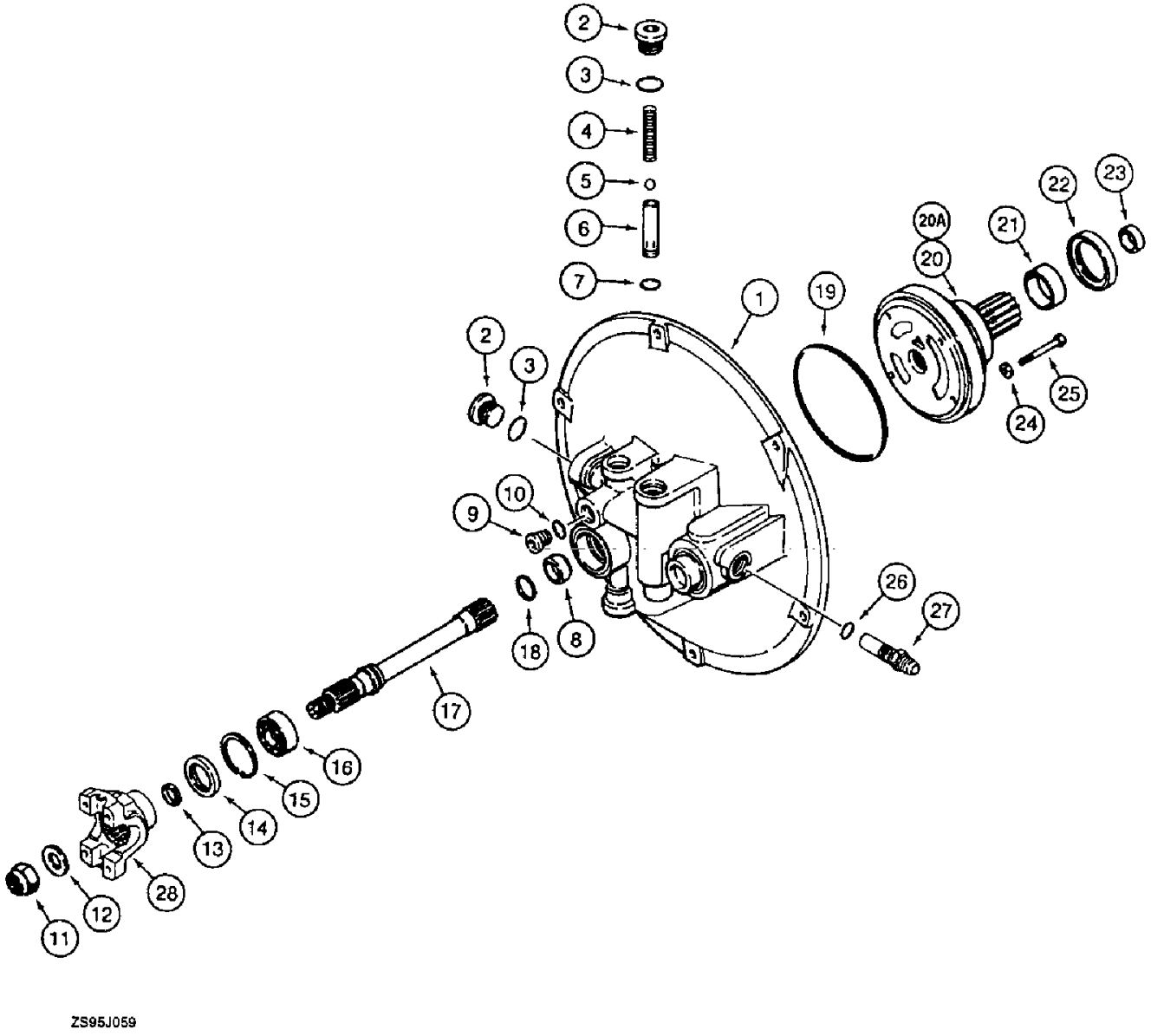
TORQUE CONVERTER HOUSING, PUMP, AND OUTPUT SHAFT



TORQUE CONVERTER HOUSING, PUMP, AND OUTPUT SHAFT

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		1348881C2		1	CONVERTER HOUSING ASSEMBLY - torque converter, complete
1		1348828C1		1	HOUSING - torque converter
2		9841223		2	PLUG Hex Soc, 1 1/16"-12 ORB
3		237-6012		1	O-RING 0.924" x 0.116" 12-1, 90 Duro, .924 ID x .116" Thk
4		A190345		1	SPRING - pump relief valve
5		211-1016		1	BALL 1/2" Dia - chrome alloy steel, 1/2 inch, grade 24
6		A183336		1	VALVE CARTRIDGE - pump relief valve
7		238-5017		1	O-RING 0.676" ID x 0.816" OD x 0.07" -017, 70 Duro, .676" ID x .070" Thk
8		A178745		1	SLEEVE - wear
9		86625138		1	PLUG Hex Soc, 7/8"-14 ORB
10		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
11		3173953R1		1	LOCK NUT M20 x 2.5, Cl 8 NUT - lock, special, prevailing torque
12		H312652		1	WASHER - flat, special, service with H224501
13		238-5212		1	O-RING -212, 70 Duro, .859" ID x .139" Thk
14		A175651		1	SEAL - oil, yoke
15		100-21206		1	SNAP RING 2.062", Int, #206 Ring, Snap, 2.062", Int, #206
16		A31260		1	BALL BEARING 25 mm ID x 52 mm OD x 15 mm BEARING - ball
17		A186527		1	SHAFT - output
18		A158354		1	RING - oil seal
19		238-5255		1	O-RING -255, 70 Duro, 5.609" ID x .139" Thk
20		A186674		1	PUMP ASSEMBLY - converter, includes items 21 through 23, no longer available, replace with 119994A1 Pump (item 20A) and A186708 Seal (item 22)

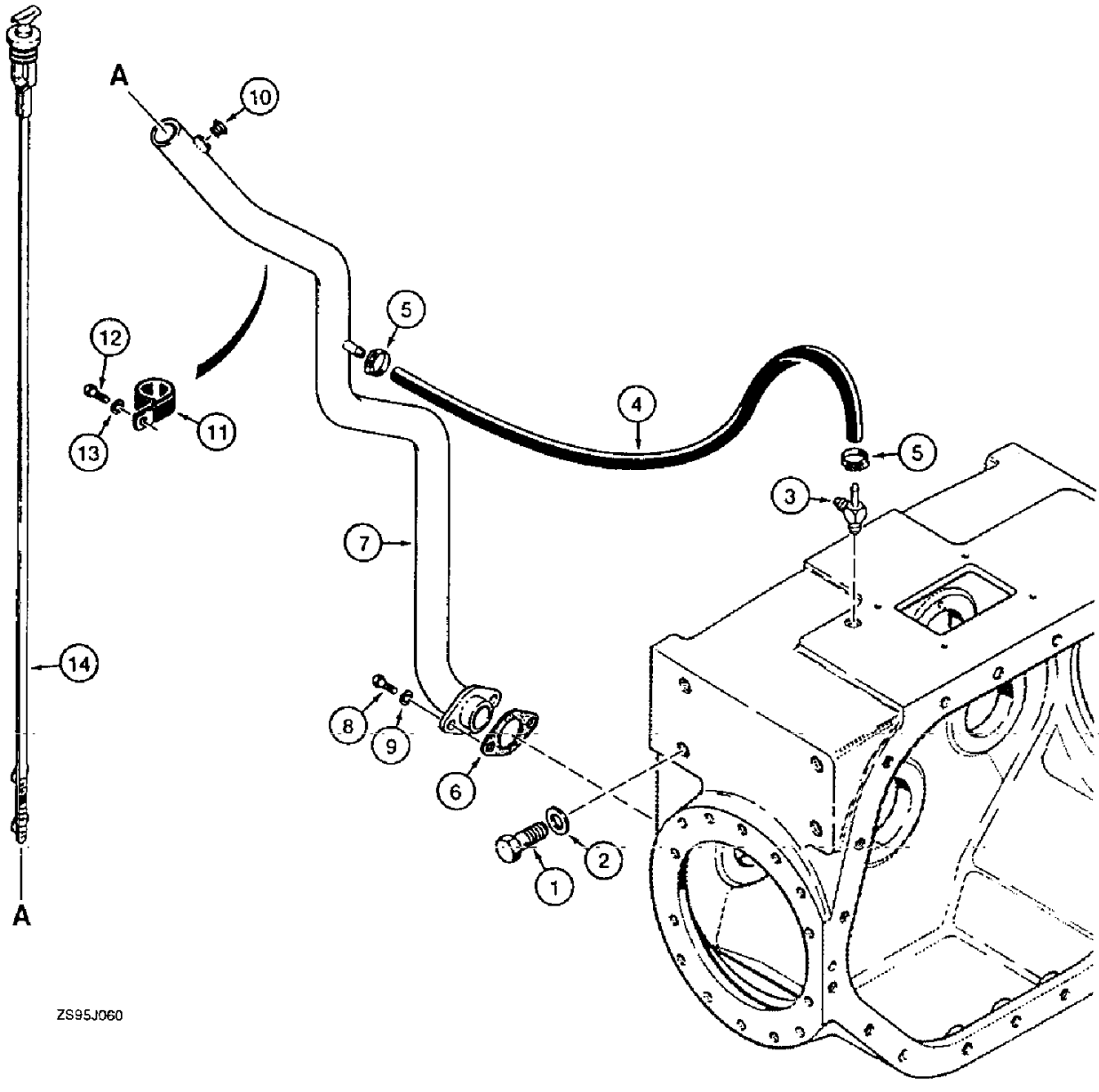
TORQUE CONVERTER HOUSING, PUMP, AND OUTPUT SHAFT



TORQUE CONVERTER HOUSING, PUMP, AND OUTPUT SHAFT

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
20A		119994A1		1	PUMP ASSEMBLY - converter, includes items 21 and 23,order A186708 Seal (item 22) separately
21		A178375		1	BUSHING - pump housing
22		A186708		1	OIL SEAL SEAL - oil, pump housing
23		A178367		1	BUSHING - pump
24		895-11008		4	WASHER M8 x 16 x 1.6 - flat, 9 x 17 x 1.6 mm
25		826-8065		4	BOLT Hex, M8 x 65, 10.9 - hex, 8 - 1.25 x 65 mm, class 10.9
26		238-6019		1	O-RING -019, 90 Duro, .801" ID x .070" Thk
27		1348840C2		1	INSERT - filter bypass
28		A159663		1	YOKE - output shaft, converter

TRANSMISSION MOUNTING, BREATHER, AND DIPSTICK

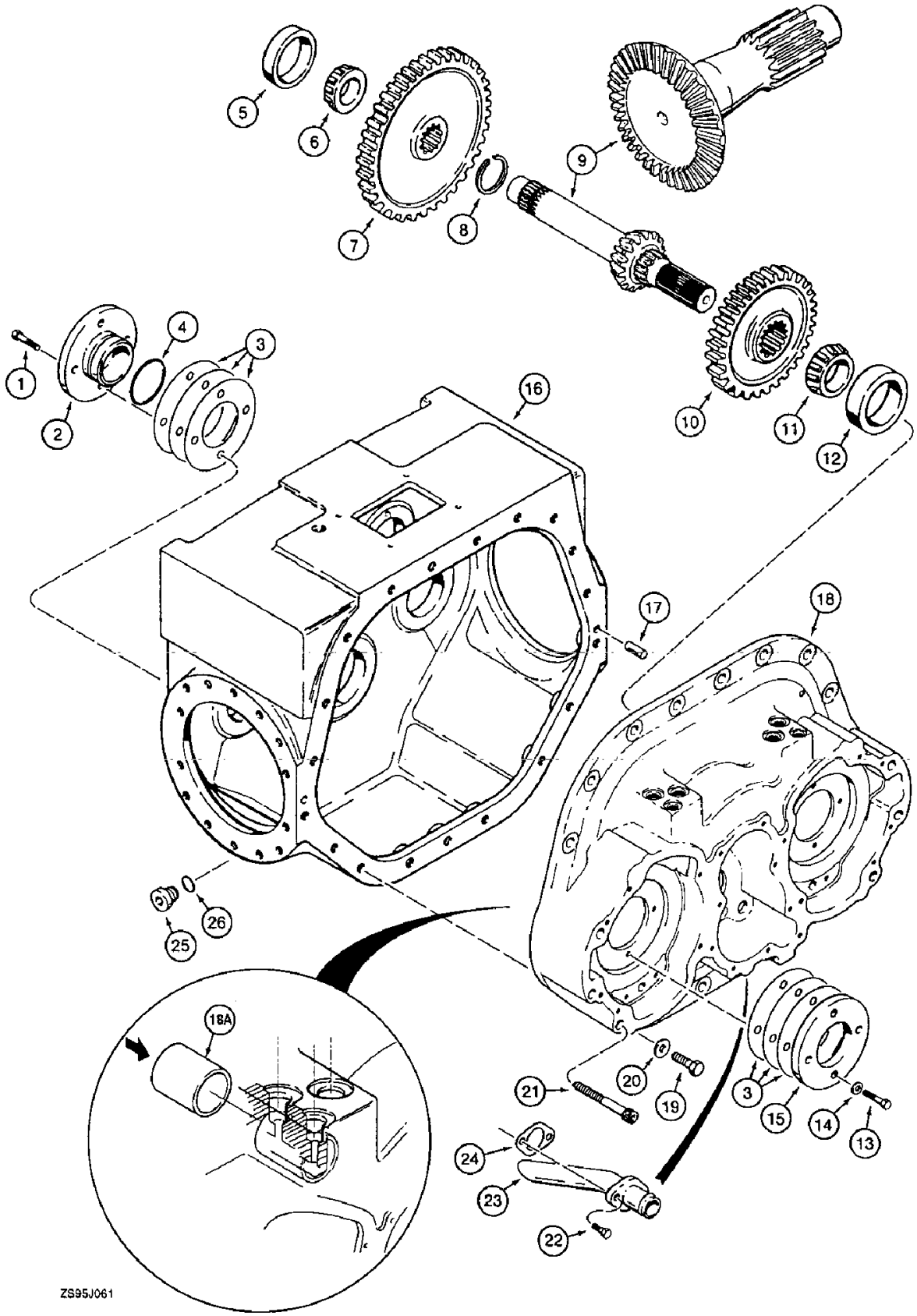


TRANSMISSION MOUNTING, BREATHER, AND DIPSTICK

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		107-91228		8	LOCK BOLT Locking, 3/4"-10 x 1 3/4", G8, Full Thd BOLT, Locking, 3/4"-10 x 1 3/4 inch", G8
2		T53681		8	WASHER - flat, special, 20 x 44 x 6 mm, hardened
3		1997075C1		1	FITTING TEE - special, brake pump and breather hose
4		H435604		1	FUEL HOSE 6.35 mm ID x 381.00 mm, SAE 30R6, SAE 30R7 Cut from Bulk Hose, Transmission Breather, See Below 6.35 mm ID x 381.00 mm, SAE 30R6, SAE 30R7
5		214-1404		2	HOSE CLAMP #4, 0.25/0.62 Type M Worm CLAMP - adj, 1/4 - 5/8 inch dia, hose
6	1	R47073		1	GASKET - dipstick tube
7		R49304		1	TUBE 1.5" OD - dipstick
8		413-616		2	BOLT Hex, 3/8"-16 x 1", G5, Full Thd - hex, 3/8 NC x 1 inch
9		492-11038		2	LOCK WASHER 3/8"
10		D63543		1	BREATHER - dipstick tube
11		515-23381		1	CLAMP 1 1/2", Insul, 3/8" Bolt P-type, To hydraulic reservoir 1 1/2", Insul, 3/8" Bolt
12		413-610		1	BOLT Hex, 3/8"-16 x 5/8", G5, Full Thd
13		492-11038		1	LOCK WASHER 3/8"
14		R52797		1	DIPSTICK - transmission
		427683C1		UAR	HOSE - bulk, 1/4 (6) x 1/2 (13) x 600 inch (15240 mm) long
		138971A1		1	SEAL KIT KIT - seal, transmission, Includes: Ref. 6

(1) Part of KIT, part number 138971A1

TRANSMISSION HOUSING, BEVEL PINION SHAFT AND GEAR



TRANSMISSION HOUSING, BEVEL PINION SHAFT AND GEAR

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
	1	1342916C2		1	TRANSMISSION
	2	1342918C2		1	TRANSMISSION
	3	130727A1		1	TRANSMISSION
	4	130728A1		1	TRANSMISSION
1		107-9620		8	LOCK BOLT Locking, 3/8"-16 x 1 1/4", G8 BOLT, Locking, 3/8-16 x 1 1/4", G8
2		G103644		2	COVER ASSY COVER - shaft
3	5	G103645		UAR	SHIM .003" Thk (0.076 mm) .003" Thk
3	5	G103647		UAR	SHIM .010" Thk (0.254 mm) .010" Thk
3	5	1348980C1		UAR	BLOCK SHIM - 0.020 inch (0.504 mm) thick
4	5	238-5151		2	O-RING -151, 70 Duro, 2.987" ID x .103" Thk
5		A50264		2	BEARING CUP 72 mm OD x 14.2 mm CUP - tapered roller bearing
6		A26719		2	ROLLER BEARING 1.5" ID x 0.8125" BEARING - tapered roller
7		G103778		2	GEAR - 51 teeth, driven, low clutch, rear
8		A27085		2	RING - retaining, low clutch gear
9	6	1348973C1		2	GEAR, BEVEL GEAR AND SHAFT - pinion, matched set
10		1981357C1		2	PINION GEAR - driven, 43 teeth, high clutch, front
11		A31264		2	ROLLER BEARING 1.625" ID x 1" BEARING - tapered roller, high clutch gear, front
12		ST973		2	TAPERED ROLLER BEARING 1.688" ID x 3.126" OD x 0.9515" CUP - tapered roller bearing, front

(1) TRANSMISSION ASSEMBLY - 53 inch (1346 mm) gauge long track models, without modulator in transmission

(2) TRANSMISSION ASSEMBLY - 64 inch (1627 mm) gauge LGP models, without modulator in transmission control

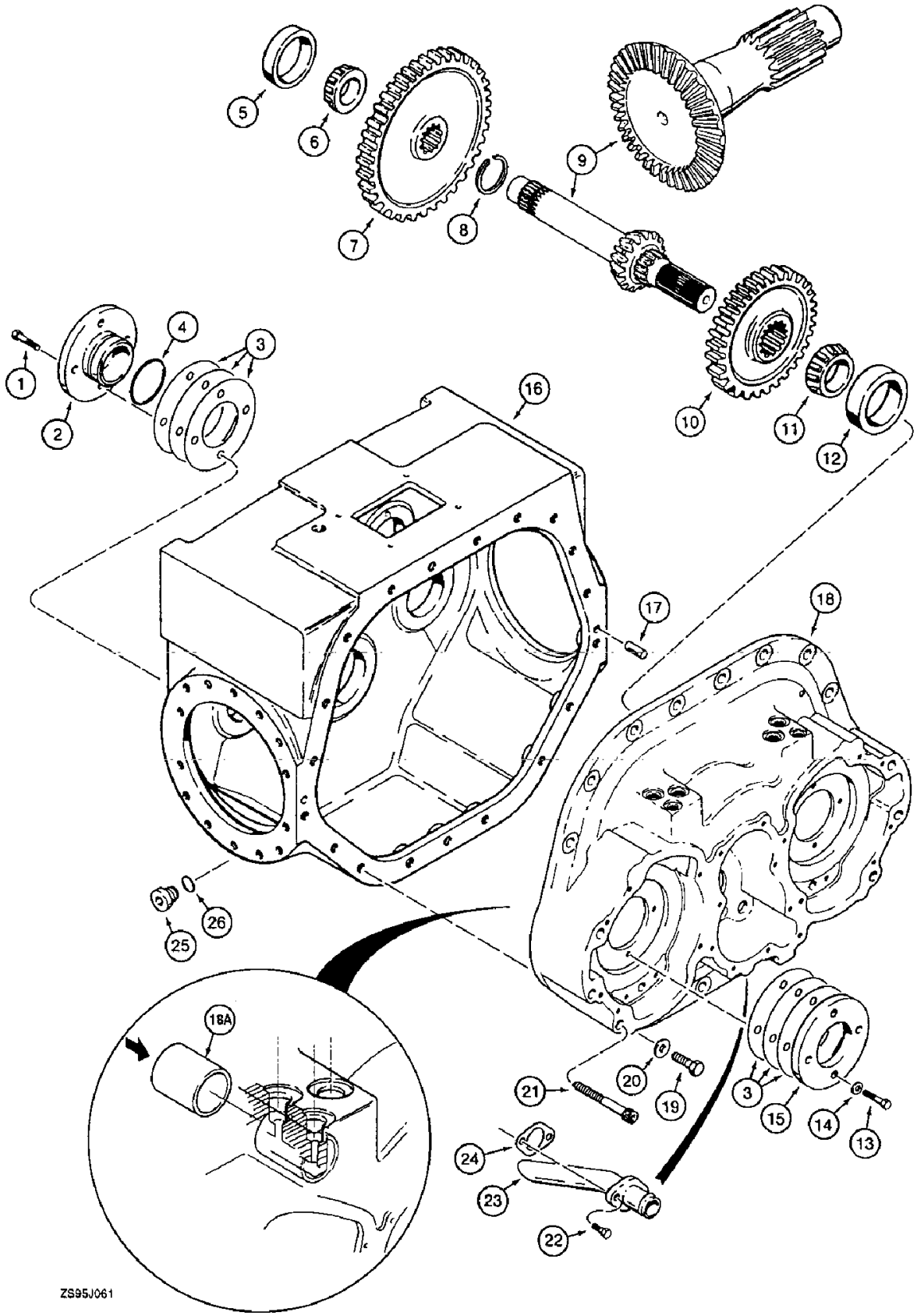
(3) TRANSMISSION ASSEMBLY - 53 inch (1346 mm) gauge long track models, with modulator in transmission control

(4) TRANSMISSION ASSEMBLY - 64 inch (1627 mm) gauge LGP models, with modulator in transmission control valve,

(5) Part of KIT, part number 138971A1

(6) Ref item #9 1348973C1 has an informational service bulletin NCR SB 006 97 issued June 24, 1997 showing the

TRANSMISSION HOUSING, BEVEL PINION SHAFT AND GEAR

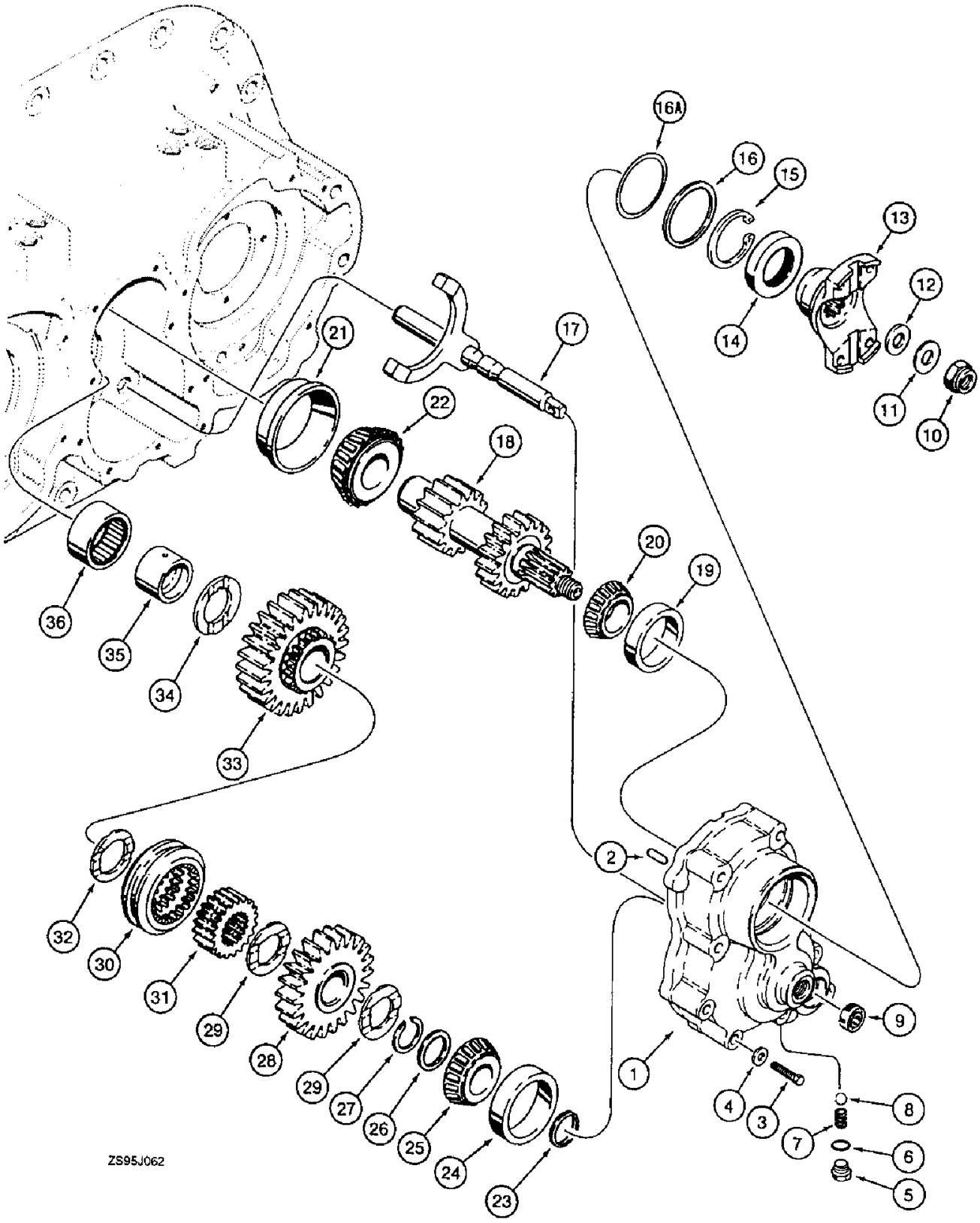


TRANSMISSION HOUSING, BEVEL PINION SHAFT AND GEAR

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
13		107-9620		8	LOCK BOLT Locking, 3/8"-16 x 1 1/4", G8 BOLT, Locking, 3/8-16 x 1 1/4", G8
14		396-21041		8	WASHER 13/32" x 13/16" x .09", HDN - flat, 13/32 x 13/16 x 3/32 inch, hardened
15		1348975C1		2	LARGE PLATE RETAINER - bearing, front
16		1997054C1		1	HOUSING - transmission, see sealant below
17		37-1820		2	DOWEL 1/2" x 1 1/4" PIN - dowel, 1/2 x 1-1/4 inch, hardened, front cover to housing
18		1348959C2		1	COVER - transmission, front, see sealant below
18A		1348982C1		UAR	WEAR PLATE SLEEVE - transmission cover, if used
19		107-91028		13	LOCK BOLT Locking, 5/8"-11 x 1 3/4", G8 BOLT, Locking, 5/8"-11 x 1 3/4", G8
20		396-11066		13	WASHER 21/32" x 1 5/16" x .095", HDN - flat, 21/32 x 1-5/16 x 3/32 inch, hardened
21		61-35064		6	HEX SOC SCREW Hex Soc Hd, 1/2"-13 x 4" BOLT - hex socket, 1/2 NC x 4 inch
22		107-9620		2	LOCK BOLT Locking, 3/8"-16 x 1 1/4", G8 BOLT, Locking, 3/8-16 x 1 1/4", G8
23		A50110		1	TUBE - suction
24	1	1981223C1		1	GASKET - suction tube
25		9841223		1	PLUG Hex Soc, 1 1/16"-12 ORB
26	1	237-6012		1	O-RING 0.924" x 0.116" 12-1, 90 Duro, .924 ID x .116" Thk
		B17555		UAR	LOCTITE SEALANT - Gasket Eliminator No. 515, 50 ml tube
		B17556		UAR	LOCTITE SEALANT - Gasket Eliminator No. 515, 300 ml tube
		138971A1		1	SEAL KIT KIT - seal, transmission, Includes: Refs. 3, 4, 24, and 26

(1) Part of KIT, part number 138971A1

TRANSMISSION RANGE SHIFT



TRANSMISSION RANGE SHIFT

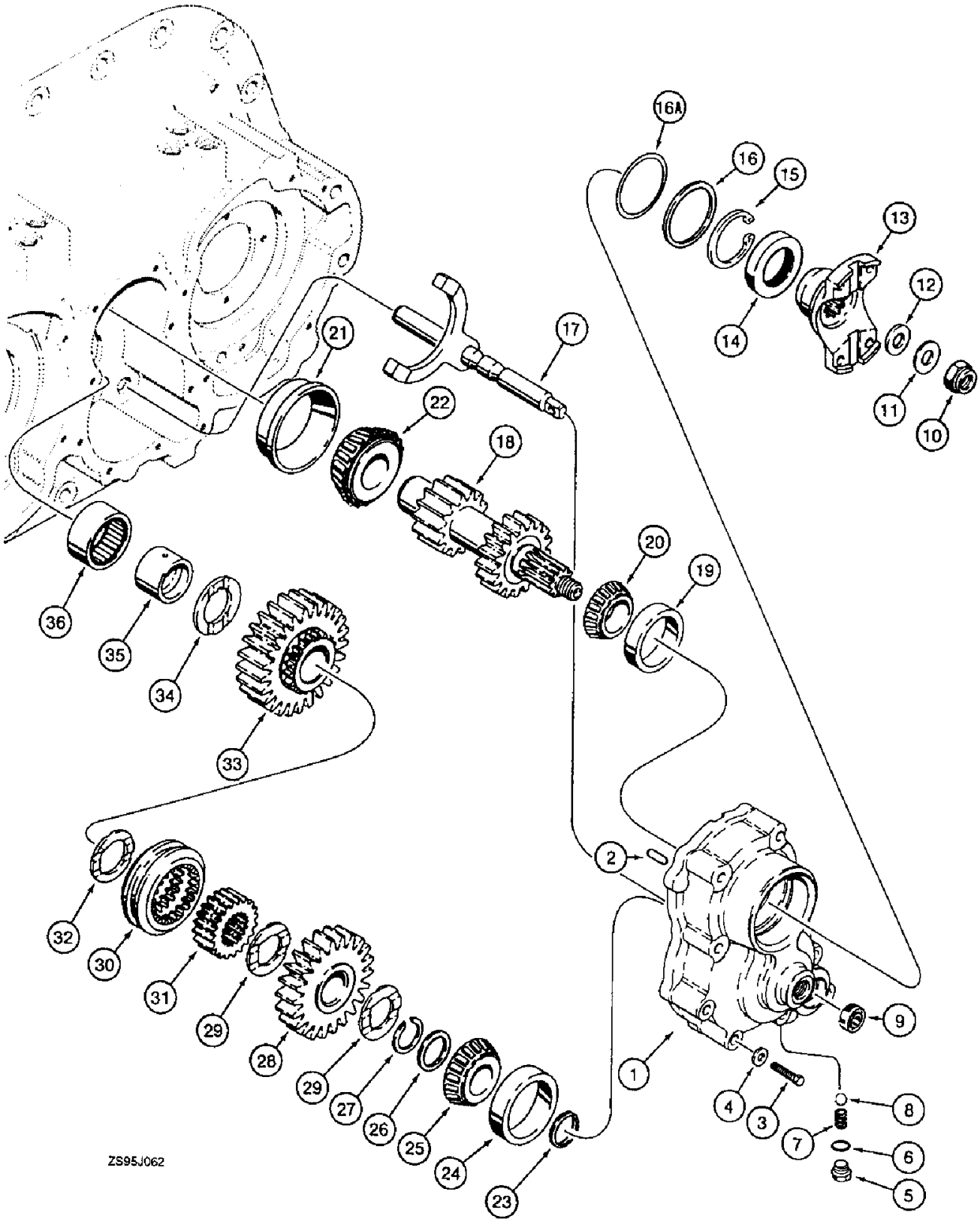
REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		REF		1	INSTRUCTION TRANSMISSION ASSEMBLY - see figure 6-8 for correct assembly
1		1348962C2		1	HOUSING ASSY. HOUSING - range gear
2		37-1820		2	DOWEL 1/2" x 1 1/4" PIN - dowel, 1/2 x 1-1/4 inch, hardened
3		107-9648		9	LOCK BOLT Locking, 3/8"-16 x 3", G8 BOLT, Locking, 3/8"-16 x 3", G8
4		396-21041		9	WASHER 13/32" x 13/16" x .09", HDN - flat, 13/32 x 13/16 x 3/32 inch, hardened
5		76349		1	PLUG Hex Hd, 9/16"-18 ORB
7		A50092		1	SPRING - detent
8		211-1316		1	BALL 1/2" Dia - chrome alloy steel, 1/2 inch, grade 200
9	1,2	G105118		1	OIL SEAL - oil, selector shaft, at range gear housing
10		131-37		1	LOCK NUT 3/4"-16 NUT - thin hex, self-locking, 3/4 inch NF, input shaft
11		32601		1	WASHER - special, special, yoke retaining
12	1,2	34395		1	SEALING WASHER WASHER - seal, special, seal
13		G110044		1	STIRRUP YOKE - input shaft
14	1,2	A39110		1	OIL SEAL - oil, yoke
15		100-21300		1	SNAP RING 3.00", Int, #300 Ring, Snap, , Housing 3.00", Int, #300
16		1997006C2		1	SHIM SPACER - 3.175 mm thick
16A	1,2	1997004C1		UAR	SHIM - 0.076 mm thick
16A	1,2	1997005C1		UAR	SHIM - 0.178 mm thick
17		G107672		1	SHAFT - range selector, with welded fork
18		G107129		1	SHAFT - input, with gears
19		165964R1		1	BEARING CUP CUP - tapered roller bearing, front, input shaft

(1) For main shaft see Figures 6-12 and 6-14

(2) Part of KIT, part number 138971A1

NOTE: For main shaft see figures 6-12 and 6-14.

TRANSMISSION RANGE SHIFT



TRANSMISSION RANGE SHIFT

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
20		560953R91		1	BEARING CONE 1.375" ID x 2.875" OD x 0.9688" BEARING - tapered roller, front, input shaft
21		G106463		1	BEARING, CUP CUP - tapered roller bearing, rear, with flange
22		ST791		1	TAPERED ROLLER BEARING 1.6255" ID x 3.376" OD x 1.202" BEARING - tapered roller, rear, input shaft
23	1,2	1981335C1		1	SEAL RING - seal, mainshaft, front
24		128242R1		1	BEARING 76.225 mm OD x 23.863 mm CUP - tapered roller bearing, front, main shaft
25		G106461		1	ROLLER BEARING BEARING - tapered roller, front, main shaft
26		1997008C1		1	SPACER - special
27		100-16131		1	SNAP RING #131, Ext Ring, Snap, , Front bearing #131, Ext
28		G107093		1	GEAR - range, front, main shaft
29		G107116		2	WASHER - thrust, range gear
30		A51806		1	COLLAR SLEEVE - range selector
31		G107110		1	HUB COLLAR - range selector
32		G107117		1	WASHER - thrust, between range selector collar and rear range gear
33		G107094		1	GEAR WHEEL GEAR - range, rear, main shaft
34		G106465		1	WASHER - thrust, range gear, rear, main shaft
35		G106696		1	BEARING RACE - bearing, needle bearing
36		H748111		1	NEEDLE BEARING BEARING - needle, main shaft at front housing cover
		B17555		UAR	LOCTITE SEALANT - Gasket Eliminator No. 515, 50 ml tube
		B17556		UAR	LOCTITE SEALANT - Gasket Eliminator No. 515, 300 ml tube
	2	138971A1		1	SEAL KIT KIT - seal, transmission, Includes: Refs. 6, 9, 12, 14, 16A and 23

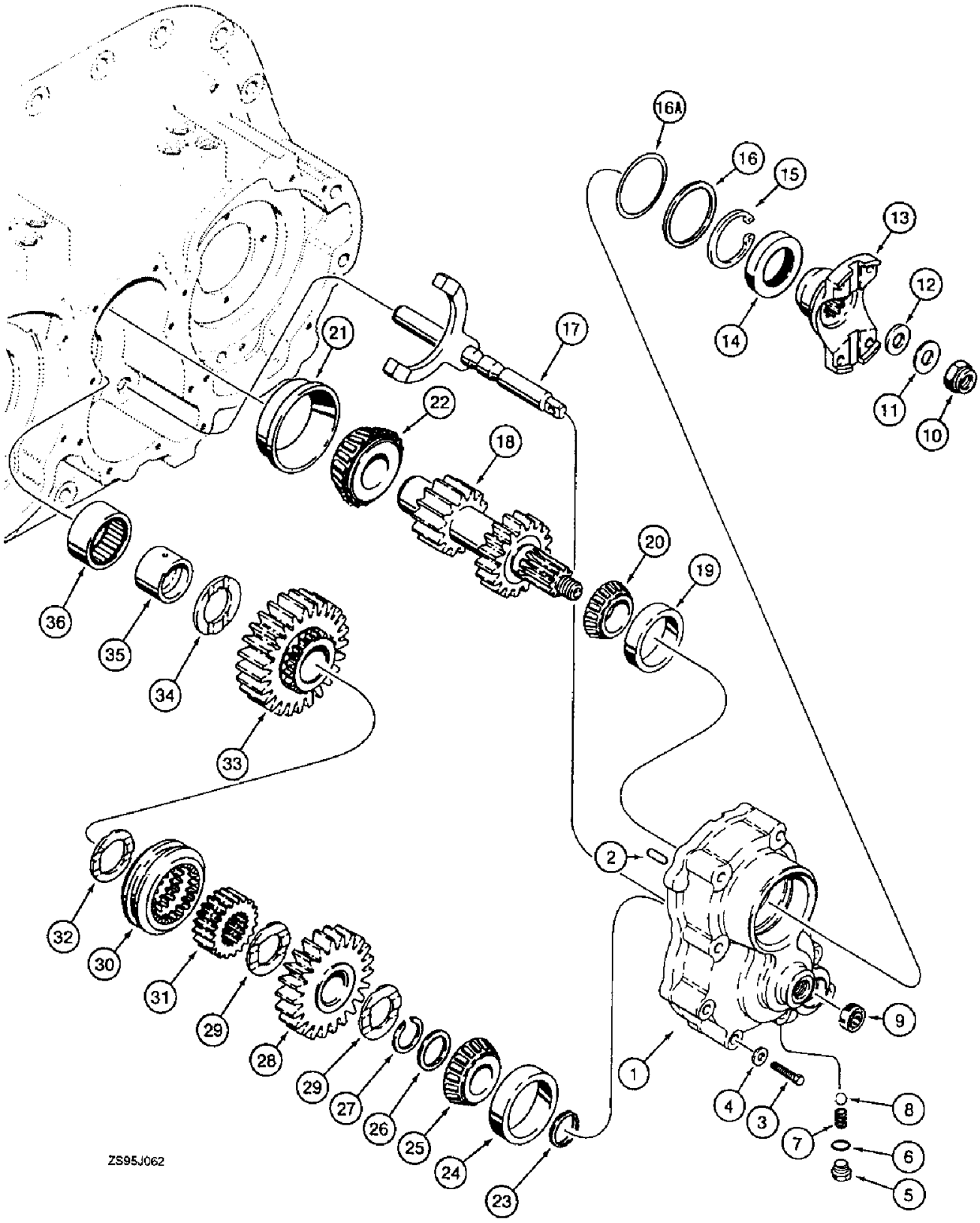
(1) PART IS 221-29 HOLLOW CORE PLUG.

(2) For main shaft see Figures 6-12 and 6-14

NOTE: For main shaft see figures 6-12 and 6-14.

550E

TRANSMISSION RANGE SHIFT



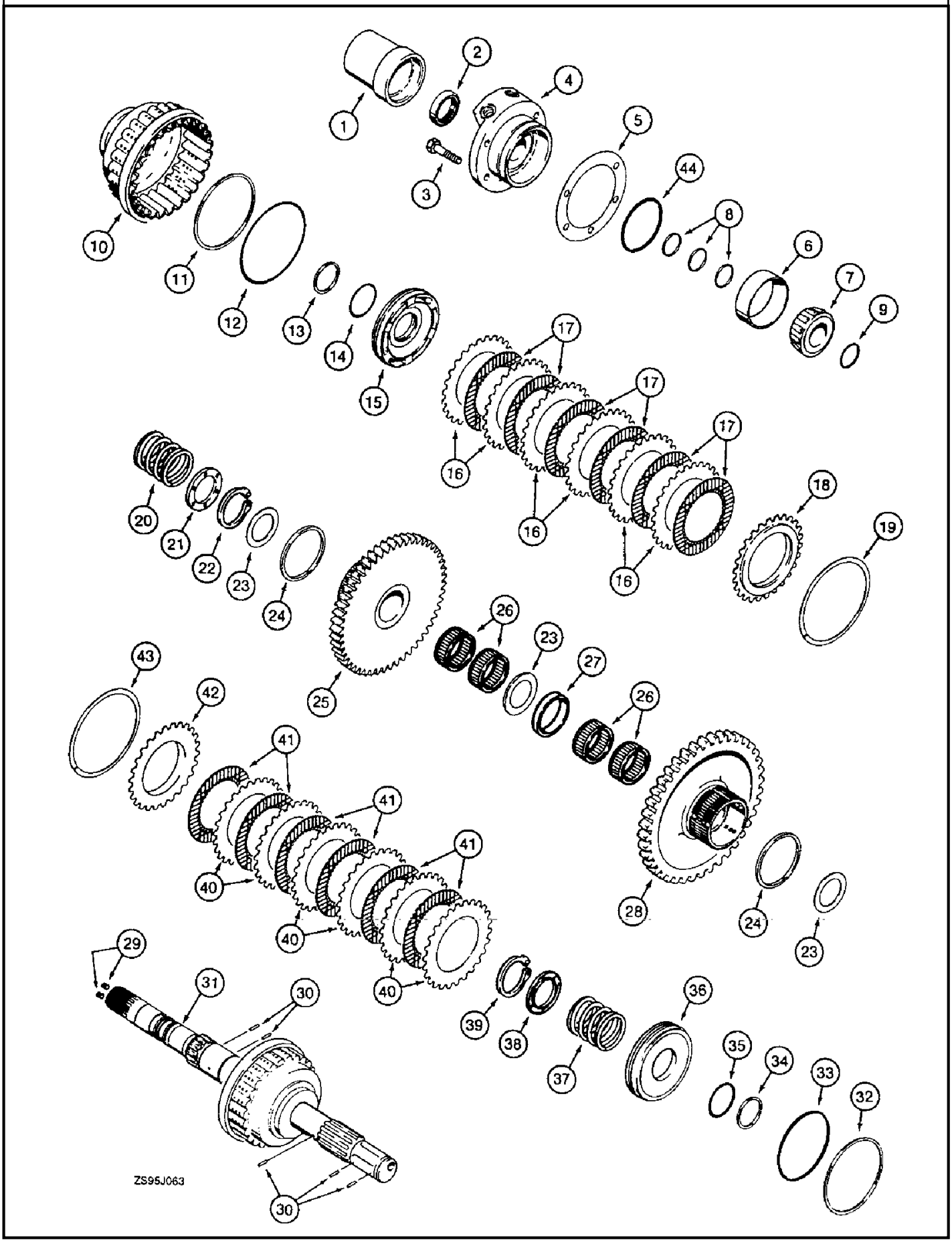
TRANSMISSION RANGE SHIFT

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
6	1	237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk

(1) Part of KIT, part number 138971A1

NOTE: For main shaft see figures 6-12 and 6-14.

TRANSMISSION MAIN SHAFT AND FORWARD-REVERSE CLUTCHES

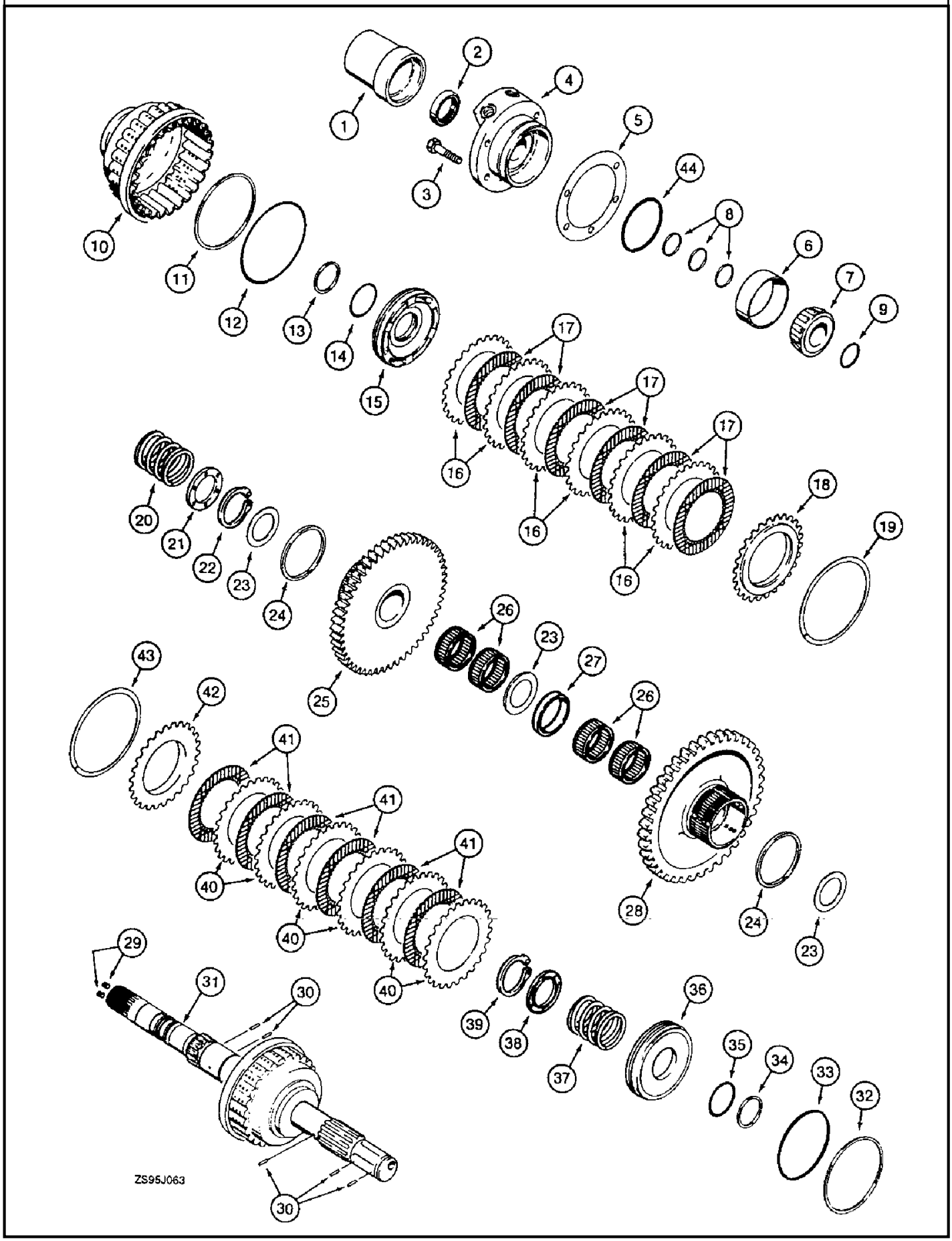


TRANSMISSION MAIN SHAFT AND FORWARD-REVERSE CLUTCHES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		REF		1	INSTRUCTION TRANSMISSION ASSEMBLY - see Figure 6-08 for correct assembly
1		G101696		1	PROTECTIVE COVER COVER - mainshaft, rear
2	1	A54107		1	OIL SEAL - oil, mainshaft, cover
3		107-9620		5	LOCK BOLT Locking, 3/8"-16 x 1 1/4", G8 BOLT, Locking, 3/8-16 x 1 1/4", G8
4		1997065C1		1	SEAL RETAINER RETAINER - bearing, mainshaft
5	1	1997066C1		UAR	SHIM - 0.076 mm thick
5	1	1997067C1		UAR	SHIM - 0.178 mm thick
5	1	1997068C1		UAR	SHIM - 0.254 mm thick
6		G109317		1	BEARING CUP CUP - tapered roller bearing
7		1342259C1		1	BEARING 38.113 mm ID x 30.467 mm - tapered roller
8	1	1348976C1		3	SEAL RING - seal (Replaces 1348976C2)
9	1	238-5324		1	O-RING -324, 70 Duro, 1.35" ID x .210" Thk -324, 70 Duro, 1.35" x .210" Thk
		1997048C2		1	CLUTCH HOUSING CLUTCH ASSEMBLY - forward, with hub
10		1997003C2		1	HUB HOUSING - clutch, with hub
11	1	A158051		1	SEAL - piston, to clutch housing
12	1	238-5156		1	O-RING -156, 70 Duro, 4.237" ID x .103" Thk Piston -156, 70 Duro, 4.237" ID x .103" Thk
13	1	A159295		1	SEAL -
14	1	238-5135		1	O-RING -135, 70 Duro, 1.925" ID x .103" Thk - 2-1/16 ID x 3/32 inch wide, to mainshaft
15		A159239		1	PISTON - forward clutch
16		A175806		6	PLATE - clutch
17		A188946		6	DRIVE PLATE PLATE - clutch, friction

(1) Part of KIT, part number 138971A1

TRANSMISSION MAIN SHAFT AND FORWARD-REVERSE CLUTCHES

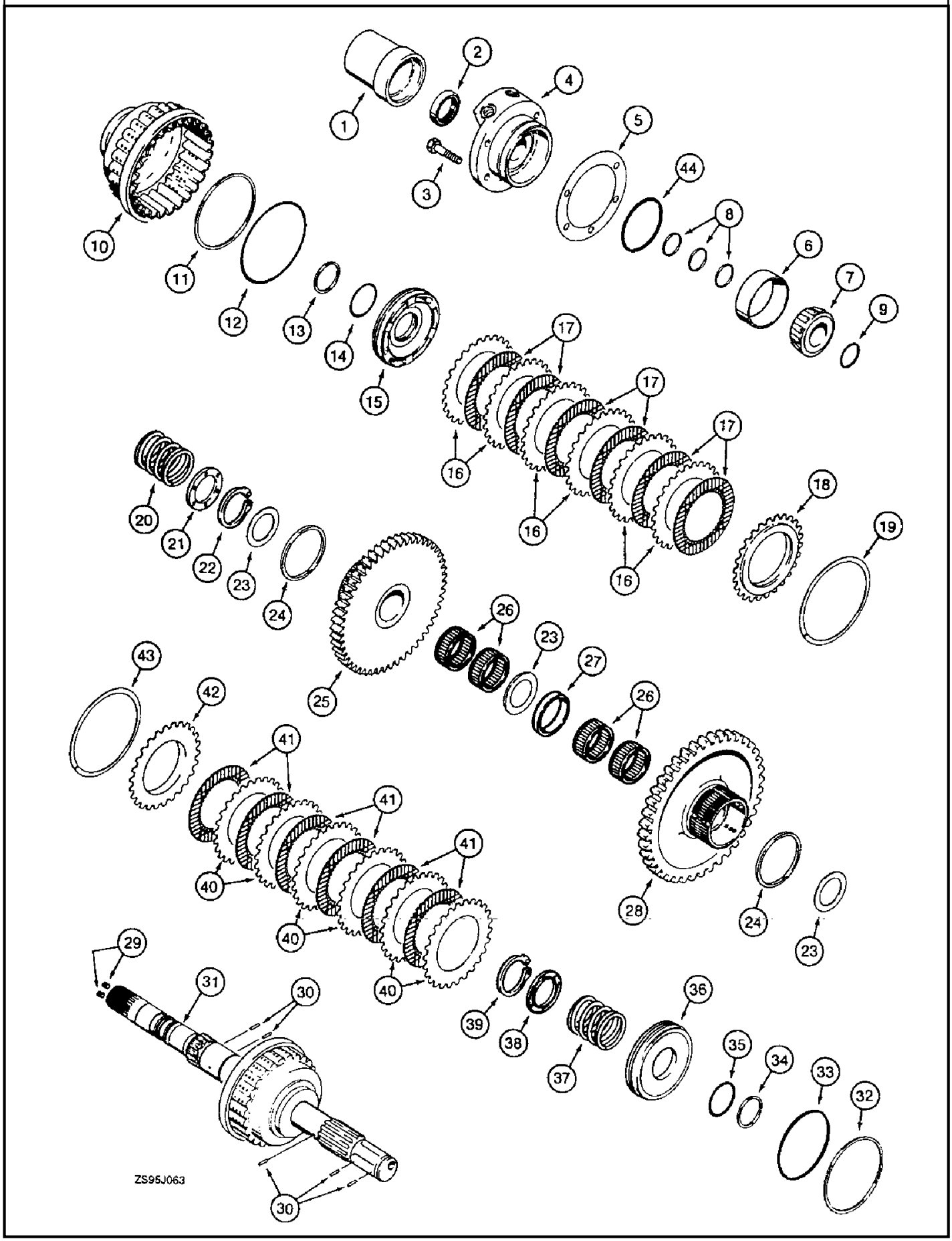


TRANSMISSION MAIN SHAFT AND FORWARD-REVERSE CLUTCHES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
18		137720A1		1	PLATE - clutch, backing
19		A158227		1	CIRCLIP RING - retaining, internal, clutch backing plate, for transmissions 1342916C2 and 1342918C2, see figure 6-8.
19		139987A1		1	CIRCLIP RING - retaining, internal, clutch backing plate, for transmissions 130727A1 and 130728A1, see figure 6-8.
20		A188080		1	SPRING -forward clutch, return
21		A188044		1	RETAINER - clutch return spring
22		100-16175		1	SNAP RING #175, Ext Ring, Snap, , Clutch #175, Ext
23		A188192		3	WASHER, THRUST WASHER - thrust, forward and reverse gears
24	1	1995174C1		2	SEALING RING SEAL - to forward and reverse gears
25		1997062C1		1	GEAR - forward clutch, 51 teeth
26		A178460		4	NEEDLE BEARING 45 mm ID x 50.025 mm OD x 16.8 mm BEARING - needle
27		A183452		1	THRUST BEARING 45.21mm ID x 66.85mm OD x 3.85mm BEARING - thrust, between gears
28		1997061C1		1	GEAR - reverse clutch, 56 teeth, for transmissions 1342916C2 and 1342918C2, see figure 6-8.
28		1997103C1		1	GEAR - reverse clutch, 56 teeth, for transmissions 130727A1 and 130728A1, see figure 6-8.
		1997045C2		1	SHAFT ASSEMBLY - main, with reverse clutch
29		83-3446		2	SET SCREW Hex Soc, 7/16"-14 x 3/8" SCREW - set, hex socket headless, 7/16 NC x 3/8 inch, flat point, use Loctite
30		38-3605		5	PIN 3/32" x 5/16", Coiled
31		1997001C2		1	HUB SHAFT - main, with reverse clutch housing

(1) Part of KIT, part number 138971A1

TRANSMISSION MAIN SHAFT AND FORWARD-REVERSE CLUTCHES

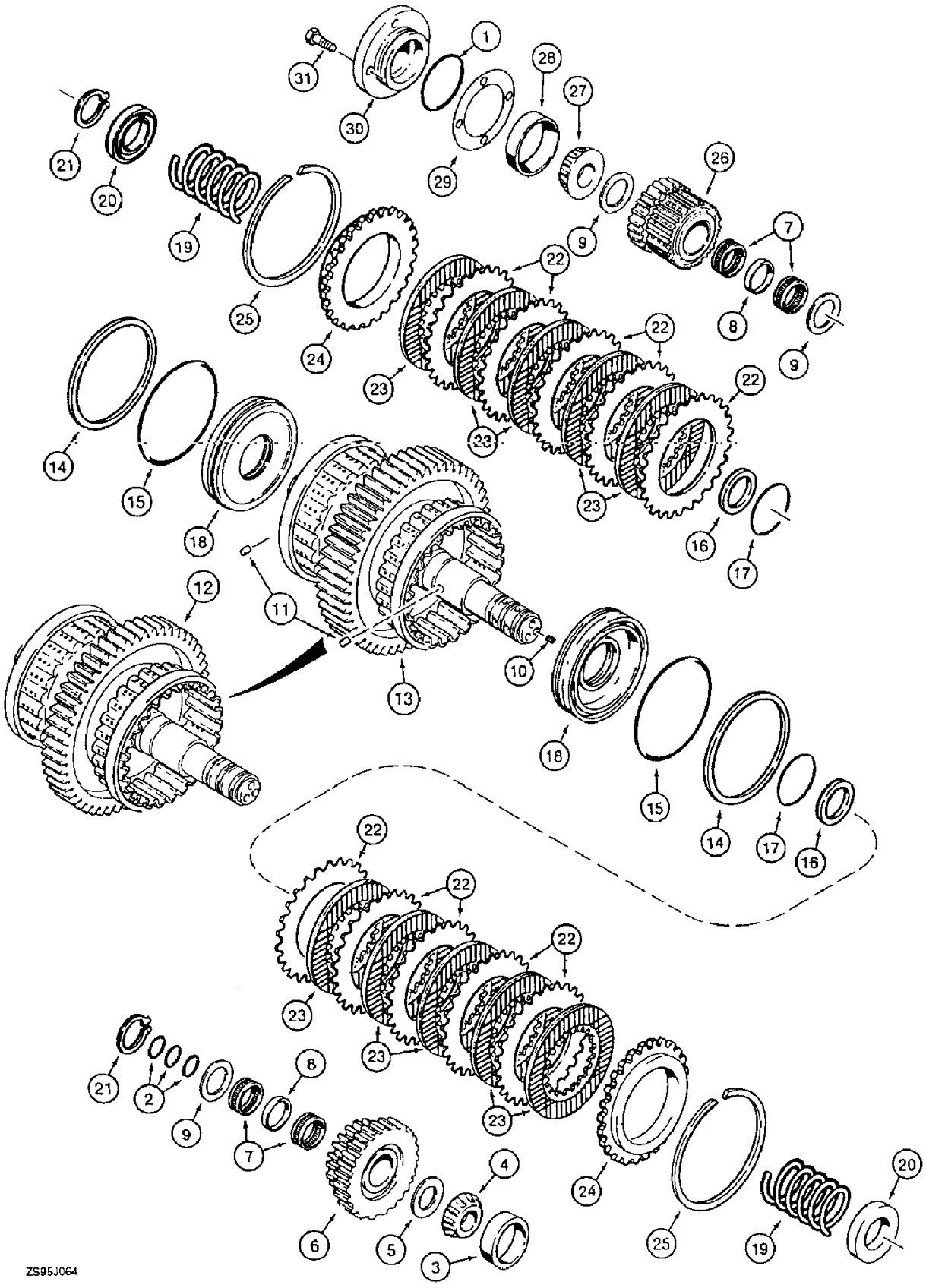


TRANSMISSION MAIN SHAFT AND FORWARD-REVERSE CLUTCHES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
32	1	A158051		1	SEAL - piston, to clutch housing
33	1	238-5156		1	O-RING -156, 70 Duro, 4.237" ID x .103" Thk Piston -156, 70 Duro, 4.237" ID x .103" Thk
34	1	A159297		1	SEAL SEAL -
35	1	238-5137		1	O-RING -137, 90 Duro, 2.05" ID x .103" Thk Piston -137, 90 Duro, 2.05" ID x .103" Thk
36		A159292		1	PISTON - clutch
37		A188080		1	SPRING - return
38		A188044		1	RETAINER - spring
39		100-16175		1	SNAP RING #175, Ext Ring, Snap, #175, Ext
40		A175806		6	PLATE - clutch, separator
41		A188946		6	DRIVE PLATE PLATE - clutch, friction
42		137720A1		1	PLATE - clutch, backing
43		A158227		1	CIRCLIP RING - retaining, internal, for transmissions 1342916C2 and 1342918C2, see figure 6-8.
43		139987A1		1	CIRCLIP RING - retaining, internal, for transmissions 130727A1 and 130728A1, see figure 6-8.
44	1	238-5154		1	O-RING -154, 70 Duro, 3.737" ID x .103" Thk
		138971A1		1	SEAL KIT KIT - seal, transmission, Includes: Refs. 2, 5, 8, 9, 11-14, 24, 32-35, and 44

(1) Part of KIT, part number 138971A1

TRANSMISSION HIGH-LOW CLUTCHES AND SHAFTS

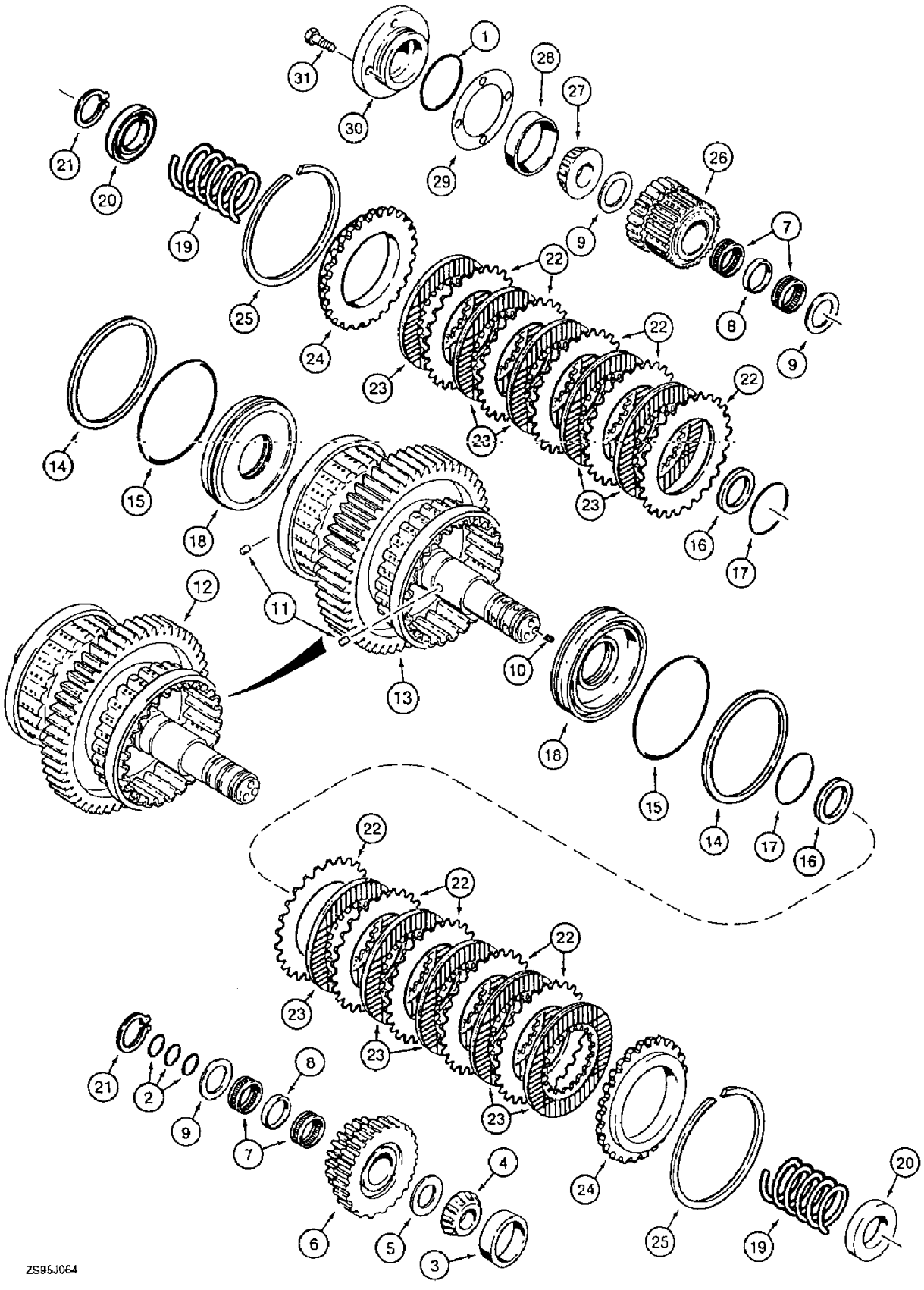


TRANSMISSION HIGH-LOW CLUTCHES AND SHAFTS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		REF		1	INSTRUCTION TRANSMISSION ASSEMBLY - see figure 6-8.
1	1	238-5151		2	O-RING -151, 70 Duro, 2.987" ID x .103" Thk
2	1	A175509		6	SEALING RING RING - seal
3		G100312		2	BEARING, CUP CUP - tapered roller bearing
4		3131513R91		2	BEARING - tapered roller
5		A175396		2	WASHER, THRUST WASHER - thrust
6		1997063C1		2	GEAR - drive, high, 29/40 teeth
7		A178460		8	NEEDLE BEARING 45 mm ID x 50.025 mm OD x 16.8 mm BEARING - needle
8		A188194		4	RING - inner
9		A188192		6	WASHER, THRUST WASHER - thrust
		1997047C2		1	CLUTCH HOUSING CLUTCH ASSEMBLY - high/low, with shaft and gear, 51 (17 mm wide) teeth, left hand
		1997046C2		1	CLUTCH HOUSING CLUTCH ASSEMBLY - high/low, with shaft and gear, 51 (42 mm wide) teeth, right hand
10		83-3446		2	SET SCREW Hex Soc, 7/16"-14 x 3/8" SCREW - set, hex socket headless, 7/16 NC x 3/8 inch, flat point, hex socket, use Loctite
11		38-3605		2	PIN 3/32" x 5/16", Coiled
12		1348993C2		1	SHAFT - high/low clutch, with gear and clutch housings, 51 (17 mm wide) teeth, left hand
13		1348991C2		1	SHAFT - high/low clutch, with gear and clutch housings, 51 (42 mm wide) teeth, right hand
14	1	A158051		2	SEAL - piston, external
15	1	238-5156		2	O-RING -156, 70 Duro, 4.237" ID x .103" Thk Piston, external -156, 70 Duro, 4.237" ID x .103" Thk
16	1	A159297		2	SEAL SEAL - piston, internal

(1) Part of KIT, part number 138971A1

TRANSMISSION HIGH-LOW CLUTCHES AND SHAFTS

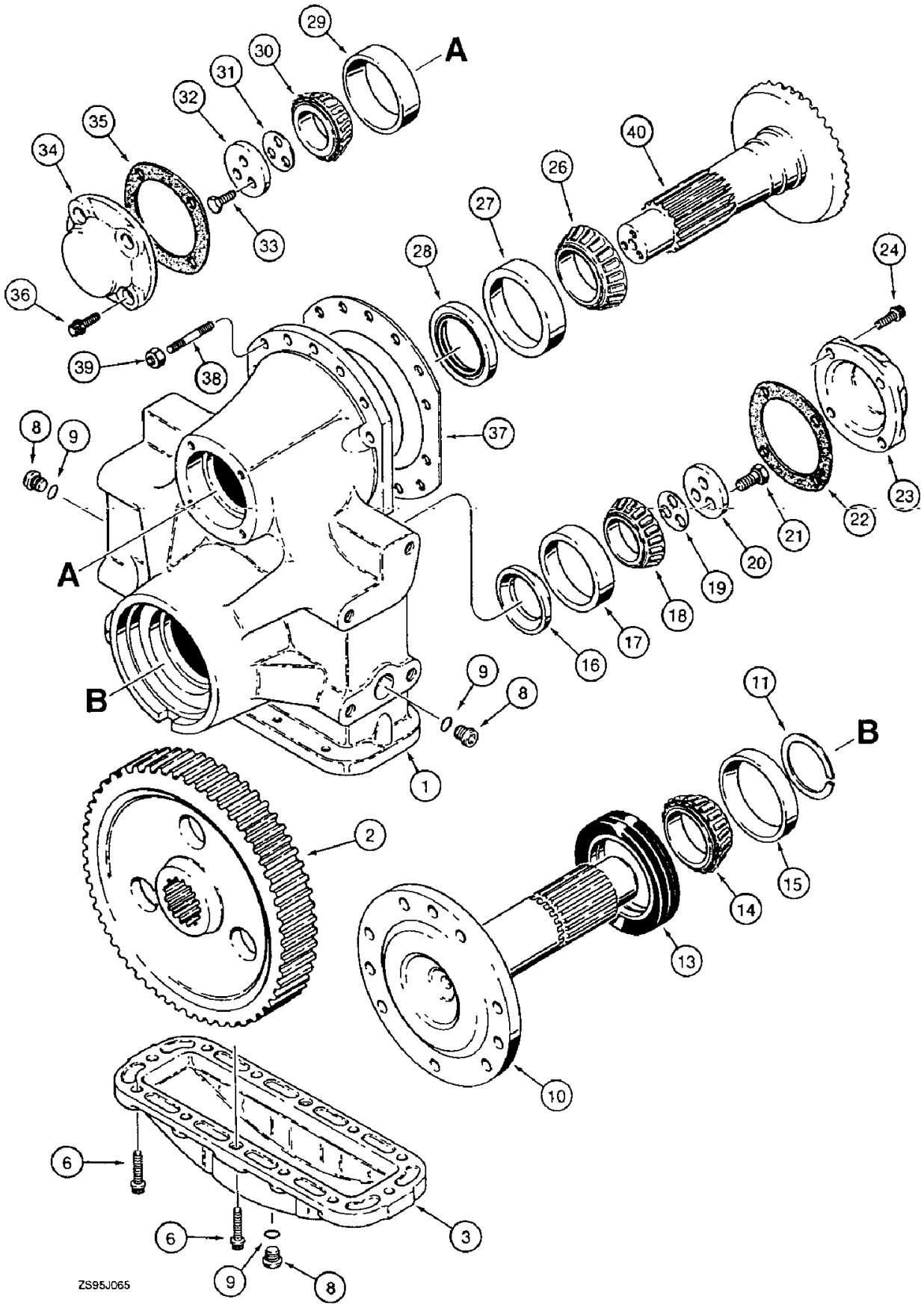


TRANSMISSION HIGH-LOW CLUTCHES AND SHAFTS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
17	1	238-5137		2	O-RING -137, 90 Duro, 2.05" ID x .103" Thk Piston, internal -137, 90 Duro, 2.05" ID x .103" Thk
18		A159292		2	PISTON - clutch
19		A188080		2	SPRING - return
20		A188044		2	RETAINER - spring
21		100-16175		2	SNAP RING #175, Ext Ring, Snap, #175, Ext
22		A175806		10	PLATE - clutch, separator
23		A188946		10	DRIVE PLATE PLATE - clutch, friction
24		137720A1		2	PLATE - clutch, backing
25		A158227		1	CIRCLIP RING - retaining, internal, clutch backing plate, for transmissions 1342916C2 and 1342918C2, see figure 6-8.
25		139987A1		1	CIRCLIP RING - retaining, internal, clutch backing plate, for transmissions 130727A1 and 130728A1, see figure 6-8.
26		1997064C1		2	GEAR - drive, low, 20/40 teeth
27		G100313		2	BEARING CONE BEARING - tapered roller, clutch shaft, rear
28		A50264		2	BEARING CUP 72 mm OD x 14.2 mm CUP - tapered roller bearing, rear
29	1	G103645		UAR	SHIM .003" Thk (0.076 mm) .003" Thk
29	1	G103647		UAR	SHIM .010" Thk (0.254 mm) .010" Thk
29	1	1348980C1		UAR	BLOCK SHIM - 0.020 inch (0.508 mm) thick
30		G103644		2	COVER ASSY COVER - shaft
31		107-9620		8	LOCK BOLT Locking, 3/8"-16 x 1 1/4", G8 BOLT, Locking, 3/8-16 x 1 1/4", G8
		138971A1		1	SEAL KIT KIT - seal, transmission, Includes: Refs. 1, 2, 14-17, and 29.

(1) Part of KIT, part number 138971A1

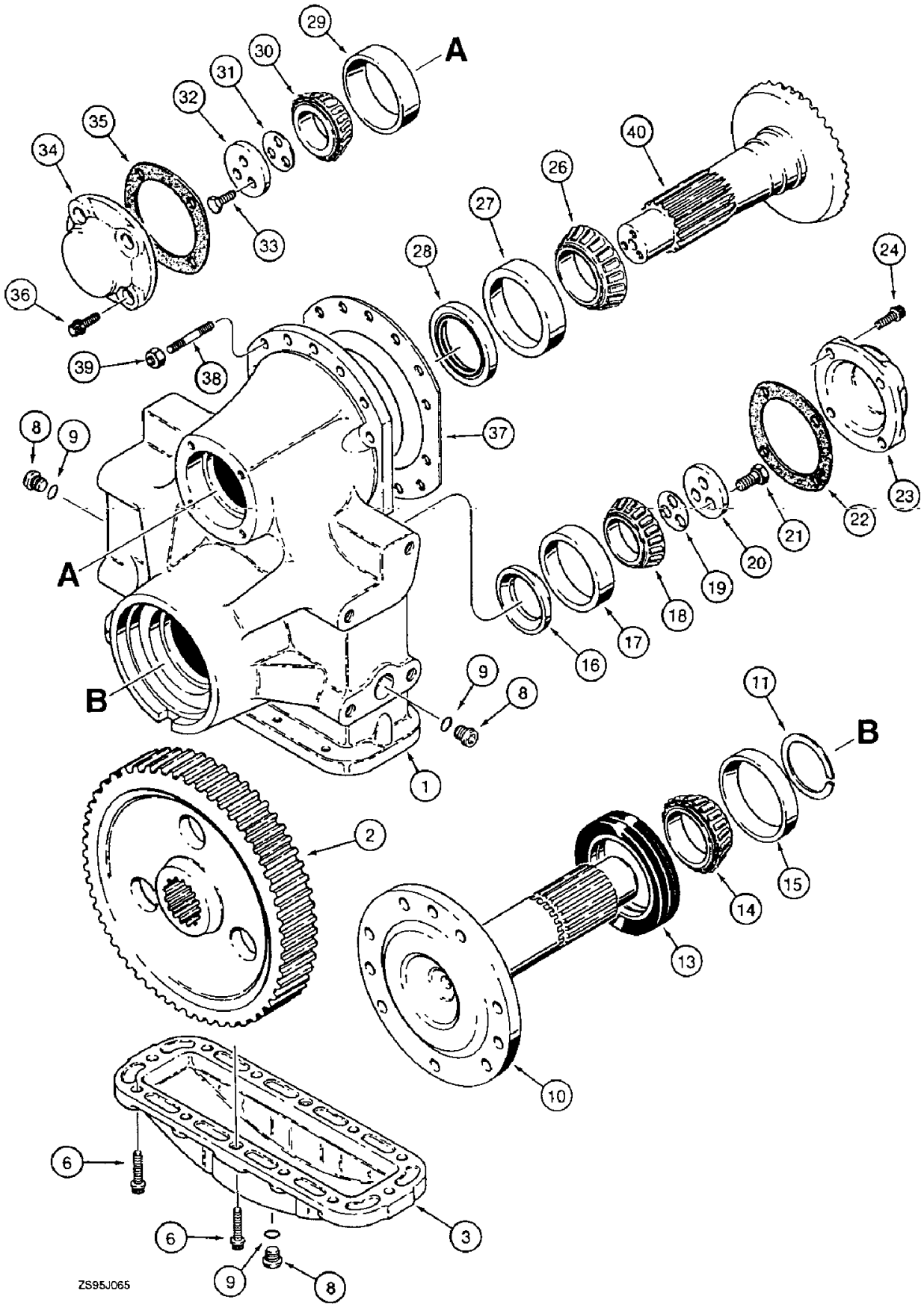
TRANSMISSION FINAL DRIVE, 53 INCH GAUGE LONG TRACK MODELS



TRANSMISSION FINAL DRIVE, 53 INCH GAUGE LONG TRACK MODELS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		REF		1	INSTRUCTION TRANSMISSION ASSEMBLY - see Figure 6-08 for correct assembly
		1342267C1		2	DRIVE ASSY. DRIVE ASSEMBLY - final, 53 inch (1346 mm) gauge long trackmodels
1		1342258C1		1	HOUSING - final drive assembly
2		G101531		1	GEAR - 76 teeth, final drive
3		1348873C1		1	COVER - lower, final drive gear, see B17555 selant below
6		180-610		12	12 PT SCREW 12 Pt Flg, 1/2"-13 x 1 1/2", G8 BOLT - 12 point flange, self-locking, 1/2 NC x 1-1/2 inch, grade 8
8		71100209		3	PLUG Hex Soc, 3/4"-16 ORB
9		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
10		1342257C1		1	SHAFT - drive, final drive
11		101-11325		1	SNAP RING #325, 3.070, Ext RING - retaining, final drive gear
13		1981095C1		1	SEAL - face, final drive shaft, outer
14		622336C1		1	BEARING CONE 84.99 mm ID x 30 mm BEARING - tapered roller, final drive shaft, outer
15		A63171		1	BEARING CUP 85 mm ID x 130 mm OD x 30.2 mm CUP - tapered roller bearing, outer
16		G100325		1	SPACER - final drive shaft
17		L35931		1	BEARING CUP CUP - tapered roller bearing, inner
18		630203C91		1	BEARING tapered roller, final drive shaft, inner
19		R21741		UAR	SHIM .005" Thk (0.127 mm) .005" Thk
19		R21742		UAR	SHIM .007" Thk (0.178 mm) .007" Thk
19		R21743		UAR	SHIM .020" Thk (0.508 mm) .020" Thk
20		1997099C1		1	PLATE - bearing retaining

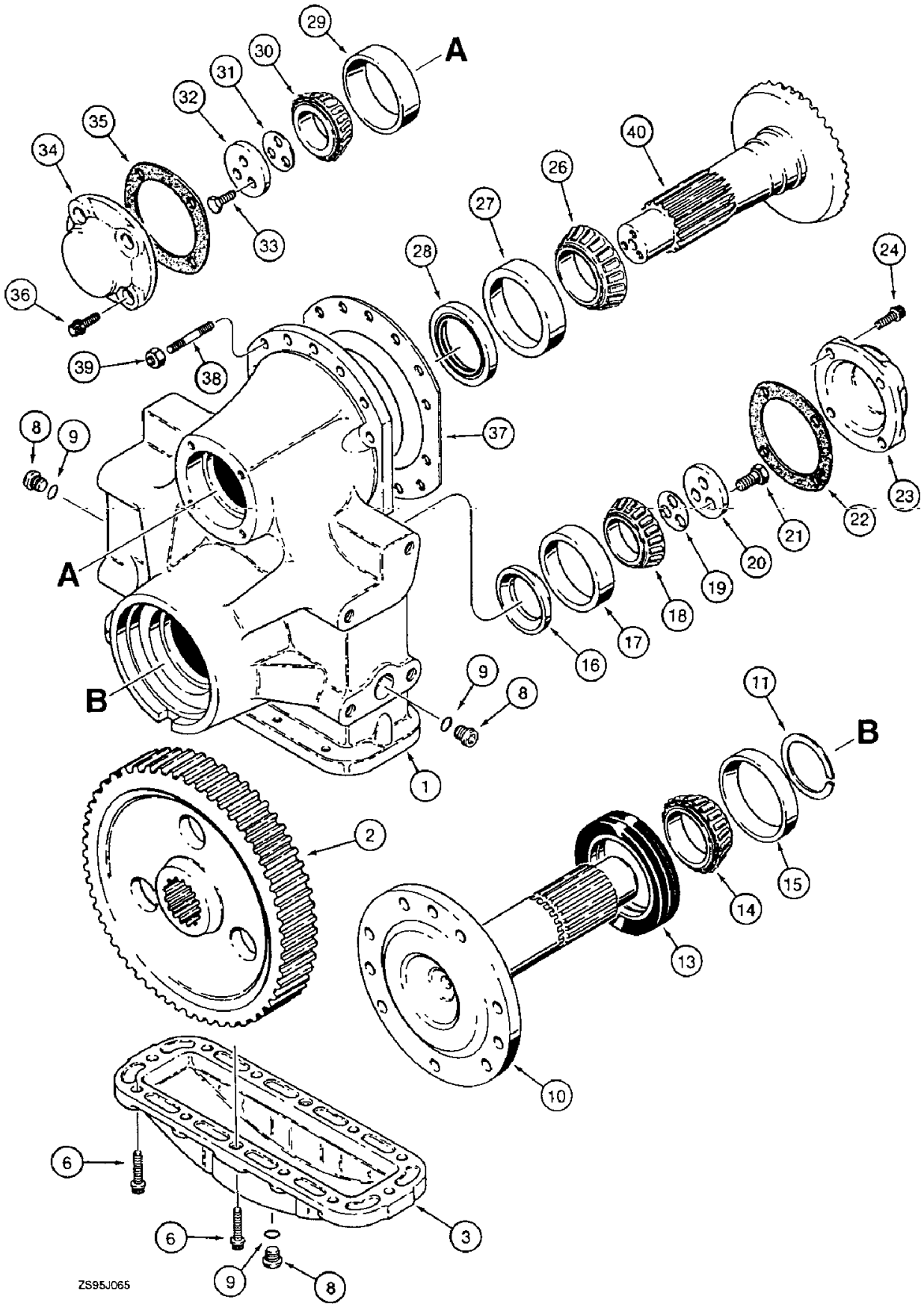
TRANSMISSION FINAL DRIVE, 53 INCH GAUGE LONG TRACK MODELS



TRANSMISSION FINAL DRIVE, 53 INCH GAUGE LONG TRACK MODELS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
21		110-14		3	LOCK BOLT Locking, 9/16"-18 x 1 1/4", G8, Full Th BOLT, d Locking, 9/16"-18 x 1 1/4", G8, Full Th
22		G101598		1	GASKET - cover
23		G105822		1	COVER ASSY COVER - shaft, final drive shaft
24		180-609		4	12 PT SCREW 12 Pt Flg, 1/2"-13 x 1", G8 BOLT - 12 point flange, self-locking, 1/2 NC x 1 inch, grade 8
26		622336C1		1	BEARING CONE 84.99 mm ID x 30 mm BEARING - tapered roller, input shaft, inner
27		A63171		1	BEARING CUP 85 mm ID x 130 mm OD x 30.2 mm CUP - tapered roller bearing, inner
28		A32015		1	SEAL - oil, final drive housing, input shaft
29		895366C1		1	BEARING CUP - tapered roller bearing, outer
30		1997114C1		1	TAPERED ROLLER BEARING 55.001 mm ID x 39 mm BEARING - tapered roller, input shaft, outer
31		G100328		UAR	SHIM .005" Thk (0.127 mm) .005" Thk
31		G100329		UAR	SHIM .007" Thk (0.178 mm) .007" Thk
31		G100330		UAR	SHIM .020" Thk (0.508 mm) .020" Thk
		138973A1		1	SEAL KIT KIT - seal and shim, includes all items marked with a bullet on figures 6-18 and 6-20
		1342267C1		2	DRIVE ASSY. DRIVE ASSEMBLY - final, 53 inch (1346 mm) gauge long track models
32		1997100C1		1	PLATE - bearing retaining
33		107-9820		3	LOCK BOLT Locking, 1/2"-13 x 1 1/4", G8, Full Thd BOLT - hex, chemical locking, 1/2 NC x 1-1/4 inch, grade 8
34		G105822		1	COVER ASSY COVER - shaft, input
35		G101598		1	GASKET - cover
36		180-609		4	12 PT SCREW 12 Pt Flg, 1/2"-13 x 1", G8 BOLT - 12 point flange, self-locking, 1/2 NC x 1 inch, grade 8

TRANSMISSION FINAL DRIVE, 53 INCH GAUGE LONG TRACK MODELS

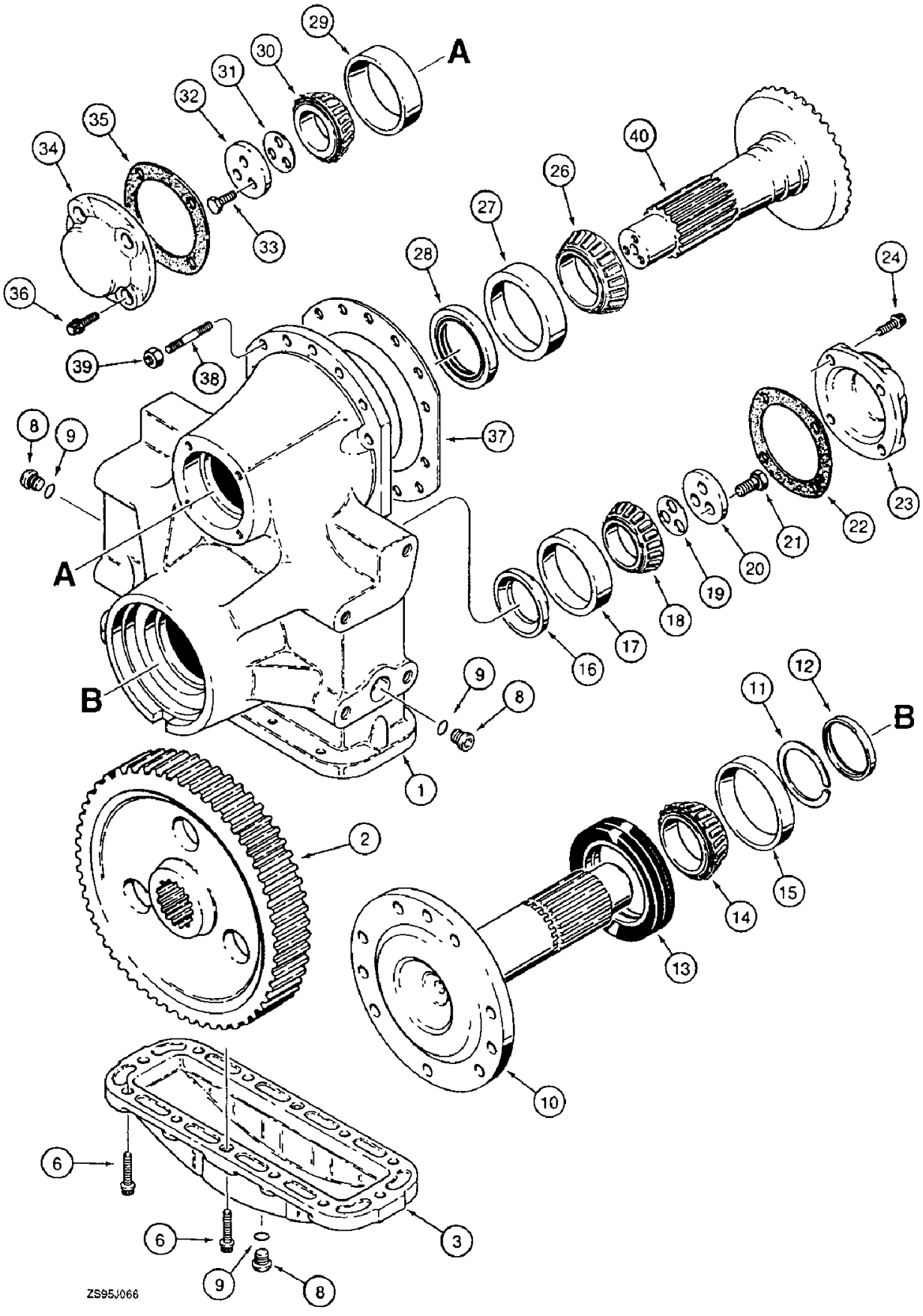


TRANSMISSION FINAL DRIVE, 53 INCH GAUGE LONG TRACK MODELS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
37	1	A50199		UAR	SHIM .003" Thk (0.076 mm) .003" Thk
37	1	A50198		UAR	SHIM .005" Thk (0.127 mm) .005" Thk
38		G100303		24	STUD - 1/2 NC x 2-5/16 inch
39		232-4118		24	NUT 1/2"-13, GC NUT, LOCK, 1/2"-13, GC
40		1348973C1		1	GEAR, BEVEL GEAR AND SHAFT - pinion, matched set, input shaft, with pinion shaft, see figure 6-8 ref 9
		B17555		UAR	LOCTITE SEALANT - Gasket Eliminator No. 515, 50 ml tube, bottom gear cover to housing
		138971A1		1	SEAL KIT KIT - seal, transmission, Includes: Ref. 37

(1) Part of KIT, part number 138971A1

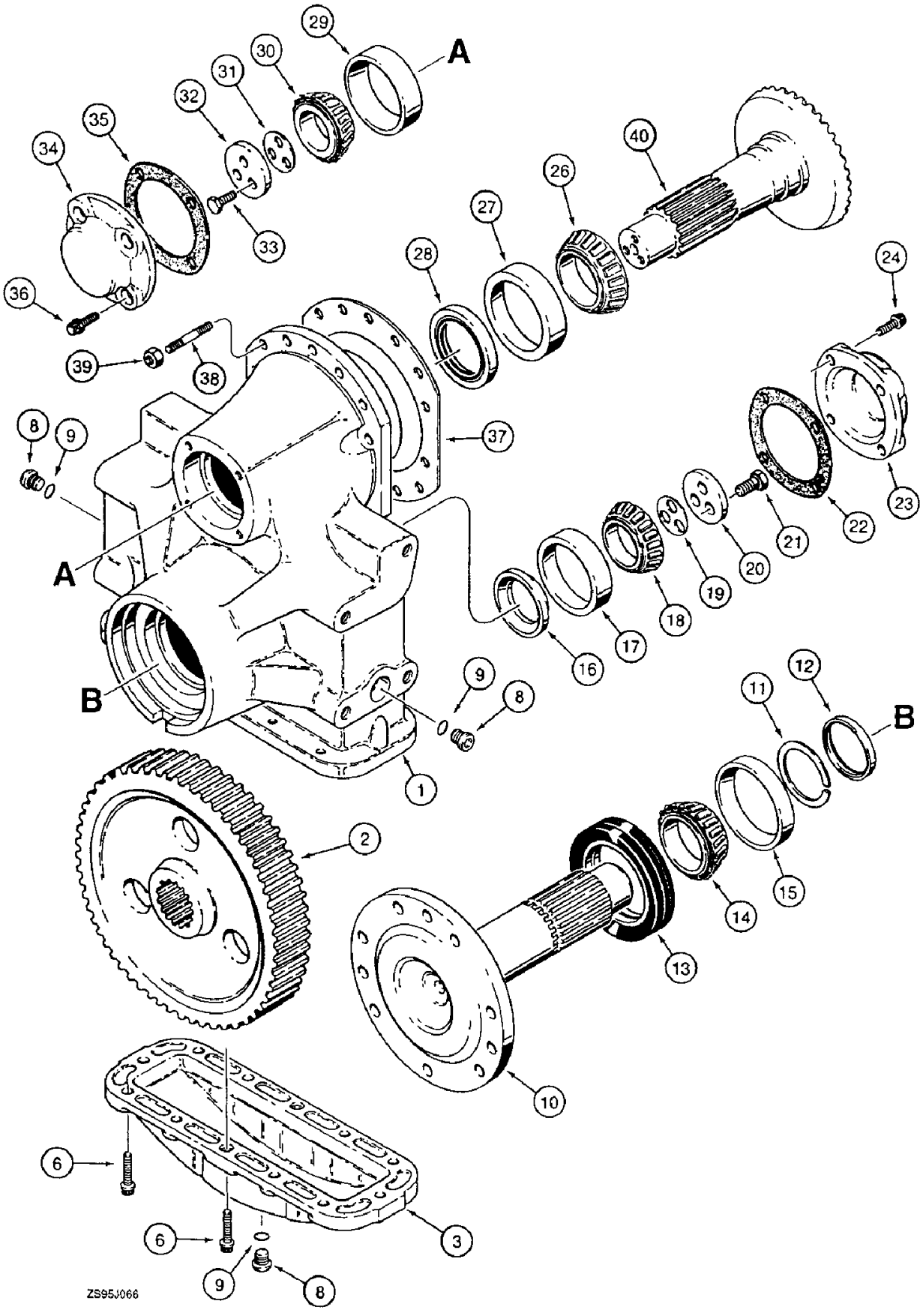
TRANSMISSION FINAL DRIVE, 64 INCH GAUGE LGP MODELS



TRANSMISSION FINAL DRIVE, 64 INCH GAUGE LGP MODELS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		REF		1	INSTRUCTION TRANSMISSION ASSEMBLY - see figure 6-8 for correct assembly
		G104730		2	TRANSMISSION DRIVE ASSEMBLY - final, 64 inch gauge LGP models
1		G104731		1	HOUSING - final drive
2		G101531		1	GEAR - final drive, 76 teeth
3		1348873C1		1	COVER - lower, final drive gear
6		180-610		12	12 PT SCREW 12 Pt Flg, 1/2"-13 x 1 1/2", G8 BOLT - 12 point flange, self-locking, 1/2 NC x 1-1/2 inch, grade 8
8		71100209		3	PLUG Hex Soc, 3/4"-16 ORB
9		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
10		G106477		1	SHAFT - final drive
11		101-11325		1	SNAP RING #325, 3.070, Ext RING - retaining, final drive gear
12		G107232		1	SPACER - final drive gear
13		1981095C1		1	SEAL - face, final drive shaft, outer
14		622336C1		1	BEARING CONE 84.99 mm ID x 30 mm BEARING - tapered roller, final drive shaft, outer
15		A63171		1	BEARING CUP 85 mm ID x 130 mm OD x 30.2 mm CUP - tapered roller bearing, outer
16		G100325		1	SPACER - final drive shaft
17		L35931		1	BEARING CUP CUP - tapered roller bearing, inner
18		630203C91		1	BEARING - tapered roller, final drive shaft, inner
19		R21741		UAR	SHIM .005" Thk (0.127 mm) .005" Thk
19		R21742		UAR	SHIM .007" Thk (0.178 mm) .007" Thk
19		R21743		UAR	SHIM .020" Thk (0.508 mm) .020" Thk
20		1997099C1		1	PLATE - retaining
21		110-14		3	LOCK BOLT Locking, 9/16"-18 x 1 1/4", G8, Full Th BOLT, d Locking, 9/16"-18 x 1 1/4", G8, Full Th

TRANSMISSION FINAL DRIVE, 64 INCH GAUGE LGP MODELS

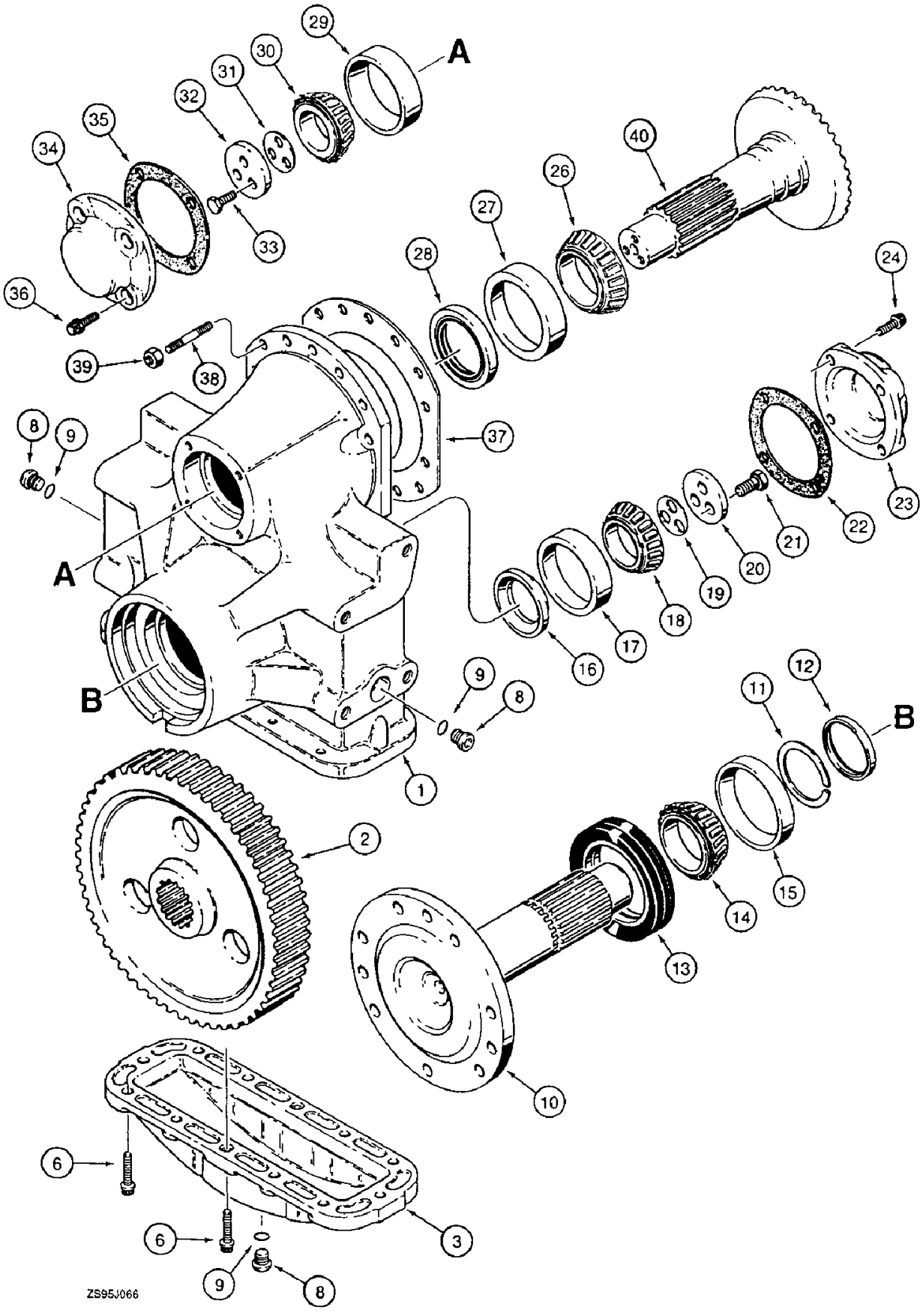


TRANSMISSION FINAL DRIVE, 64 INCH GAUGE LGP MODELS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
22		G101598		1	GASKET - cover
23		G105822		1	COVER ASSY COVER - shaft, final drive shaft
24		180-609		4	12 PT SCREW 12 Pt Flg, 1/2"-13 x 1", G8 BOLT - 12 point flange, self-locking, 1/2 NC x 1 inch, grade 8
26		622336C1		1	BEARING CONE 84.99 mm ID x 30 mm BEARING - tapered roller, input shaft, inner
27		A63171		1	BEARING CUP 85 mm ID x 130 mm OD x 30.2 mm CUP - tapered roller bearing, inner
28		A32015		1	SEAL - oil, final drive housing, input shaft
29		895366C1		1	BEARING CUP - tapered roller bearing, outer
30		1997114C1		1	TAPERED ROLLER BEARING 55.001 mm ID x 39 mm BEARING - tapered roller, input shaft, outer
31		G100328		UAR	SHIM .005" Thk (0.127 mm) .005" Thk
31		G100329		UAR	SHIM .007" Thk (0.178 mm) .007" Thk
31		G100330		UAR	SHIM .020" Thk (0.508 mm) .020" Thk
		138973A1		1	SEAL KIT KIT - seal and shim, includes all items marked with a bullet on figure 6-22
		G104730		2	TRANSMISSION DRIVE ASSEMBLY - final, 64 inch gauge LGP models
32		1997100C1		1	PLATE - bearing retaining
33		107-9820		3	LOCK BOLT Locking, 1/2"-13 x 1 1/4", G8, Full Thd BOLT - hex, chemical locking, 1/2 NC x 1-1/4 inch, grade 8
34		G105822		1	COVER ASSY COVER - shaft
35		G101598		1	GASKET - cover
36		180-609		4	12 PT SCREW 12 Pt Flg, 1/2"-13 x 1", G8 BOLT - 12 point flange, self-locking, 1/2 NC x 1 inch, grade 8
37	1	A50199		UAR	SHIM .003" Thk (0.076 mm) .003" Thk

(1) Part of KIT, part number 138971A1

TRANSMISSION FINAL DRIVE, 64 INCH GAUGE LGP MODELS



TRANSMISSION FINAL DRIVE, 64 INCH GAUGE LGP MODELS

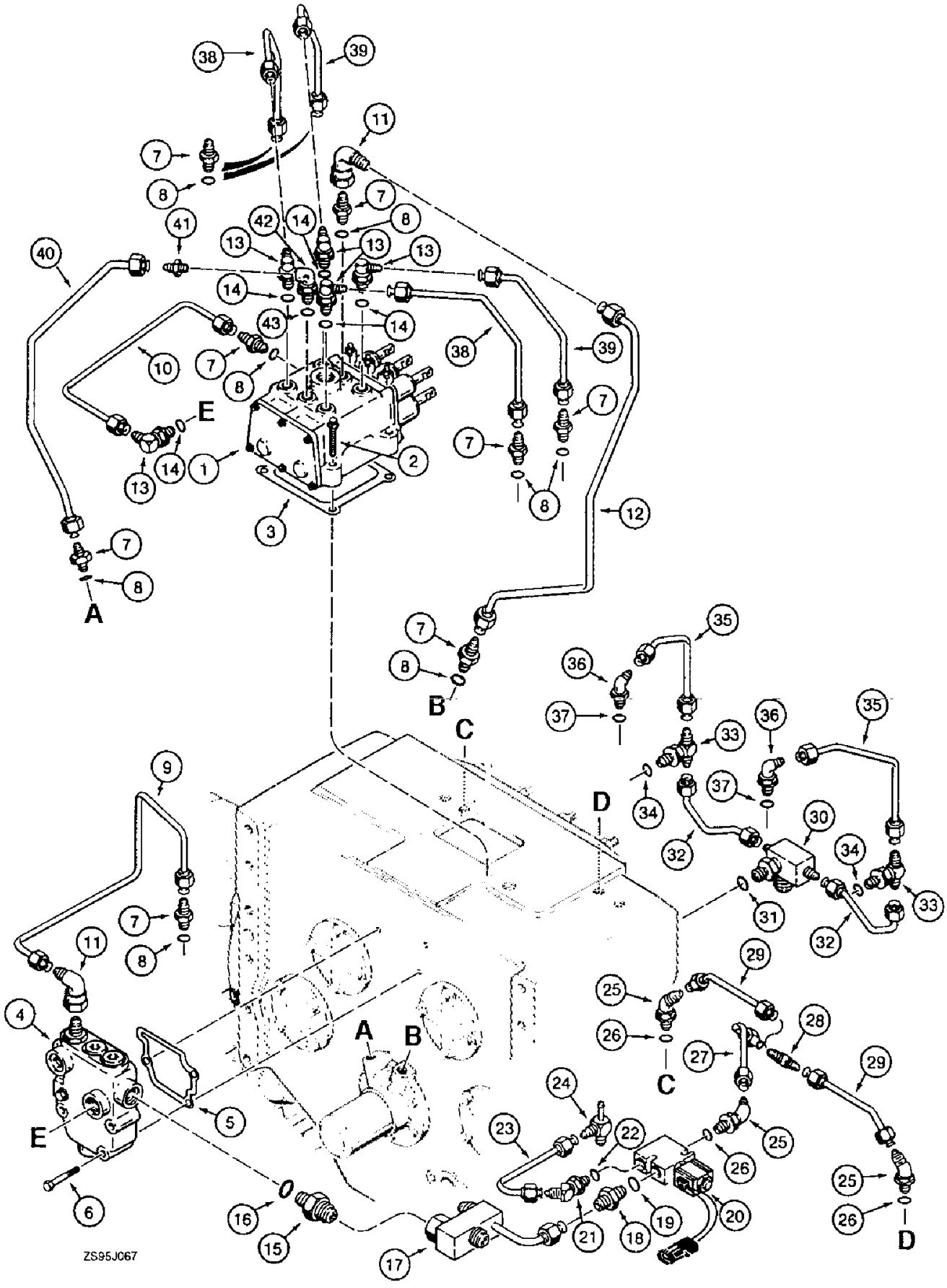
REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
37	1	A50198		UAR	SHIM .005" Thk (0.127 mm) .005" Thk
38		G100303		24	STUD - 1/2 NC x 2-5/16 inch
39		232-4118		24	NUT 1/2"-13, GC NUT, LOCK, 1/2"-13, GC
40		1348973C1		1	GEAR, BEVEL GEAR AND SHAFT - pinion, matched set, input shaft, with pinion shaft, see figure 6-8, ref 9
		B17555		UAR	LOCTITE SEALANT - Gasket Eliminator No. 515, 50 ml tube, botton gear cover to housing
		138971A1		1	SEAL KIT KIT - seal, transmission, Includes: Ref. 37.
	2	138973A1		1	SEAL KIT KIT - seal and shim, includes all items marked with a bullet on figure 6-6 thru 6-28

(1) Part of KIT, part number 138971A1

(2) Ref item #40 1348973C1 has an informational service bulletin NCR SB 006 97 issued June 24, 1997 showing the

6-26		p1	7/2013

TRANSMISSION HYDRAULIC LINES, **(WITHOUT MODULATOR IN TRANSMISSION CONTOL VALVE 1542619C1)



TRANSMISSION HYDRAULIC LINES, **(WITHOUT MODULATOR IN TRANSMISSION CONTOL VALVE 1542619C1)

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		REF		1	INSTRUCTION TRANSMISSION ASSEMBLY - see Figure 6-08 for correct assembly
1		1542619C1		1	VALVE ASSEMBLY - transmission control, without modulator, parts list Figure 6-30
2		180-607		4	12 PT SCREW 12 Pt Flg, 3/8"-16 x 2", G8 BOLT - 12 point flange, self-locking, 3/8 NC x 2 inch, grade 8
3	1,2	1986527C1		1	GASKET -
4		1346352C2		1	VALVE ASSEMBLY - modulator
5	1,2	G105635		1	GASKET GASKET - modulator valve
6		107-9640		3	LOCK BOLT Locking, 3/8"-16 x 2 1/2", G8 BOLT - hex, chemical locking, 3/8 NC x 2-1/2 inch, grade 8
7		218-5059		9	HYD CONNECTOR 3/4"-16, 37º x 3/4"-16, O-Ring ADAPTER - straight, 3/4-16 inch flare x O-ring boss
8		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
9		1997010C2		1	TUBE - forward/reverse track
10		G108278		1	HYD. TUBE 0.5" OD TUBE - high/low track, control valve to modulator valve
11		218-5230		2	ELBOW 90º, 3/4"-16, 37º x 3/4"-16, 37º Fem Sw - 90 degree, 3/4-16 inch flare x swivel
12		1997056C1		1	TUBE - forward
13		218-5106		5	ELBOW 90º, 3/4"-16, 37º x 3/4"-16, O-Ring - 90 degree, 3/4-16 inch flare x adj O-ring boss
14		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
15		218-5065		1	HYD CONNECTOR 1 1/16"-12, 37º x 7/8"-14, O-Ring ADAPTER - straight, 1-1/16-12 flare x 7/8-14 inch O-ring boss

(1) Part of KIT, part number 138971A1

(2) Used on P.I.N. JJG0214705 and before, and on P.I.N. JJG0214716, and on P.I.N.\xd5 s JJG0214733 through

****NOTE: Used on P.I.N. JJG0214705 and before, and on P.I.N. JJG0214716, and on P.I.N.\xd5 s JJG0214733 through JJG0214736.**

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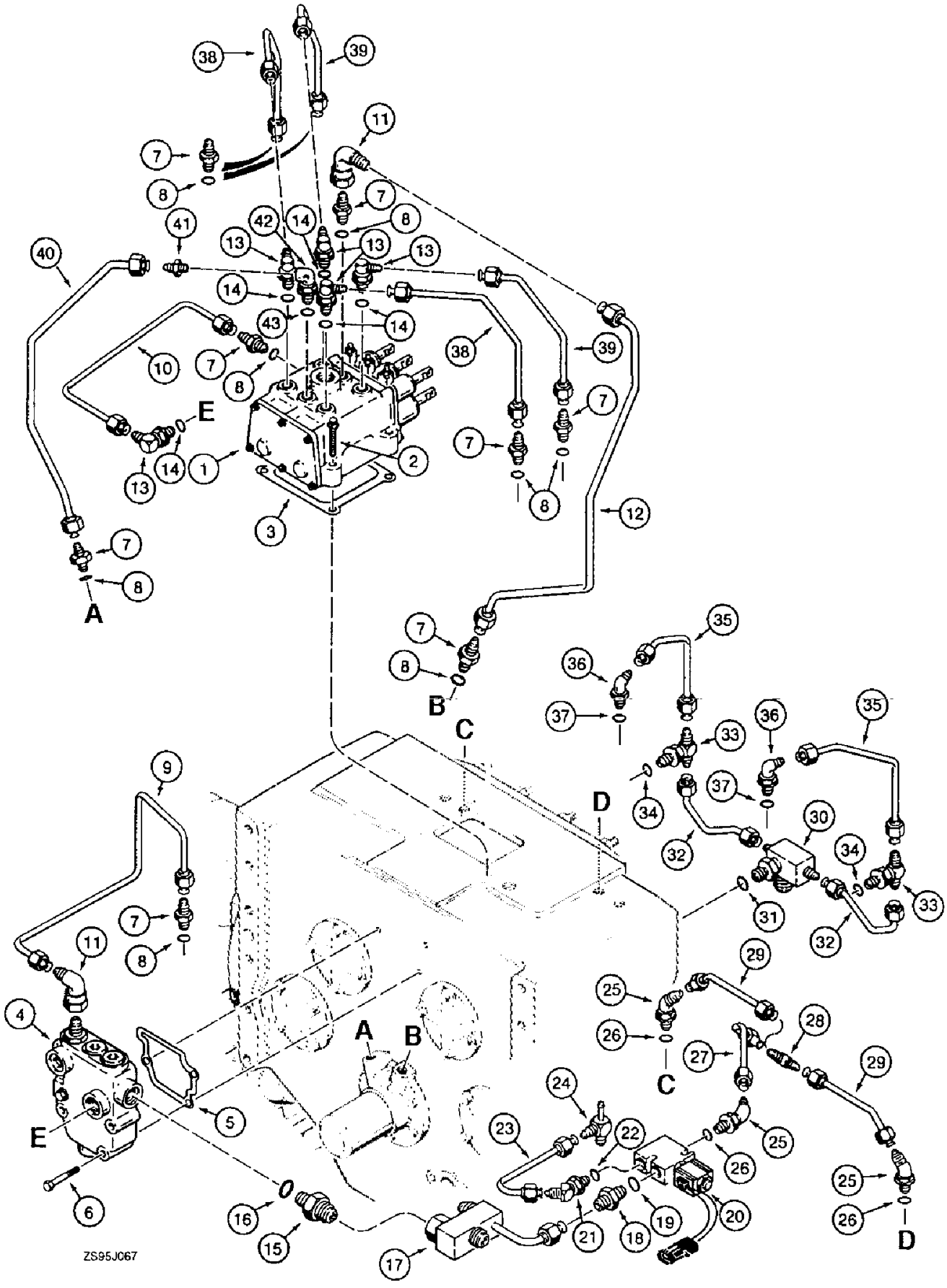
TRANSMISSION HYDRAULIC LINES, **(WITHOUT MODULATOR IN TRANSMISSION CONTOL VALVE 1542619C1)



TRANSMISSION HYDRAULIC LINES, **(WITHOUT MODULATOR IN TRANSMISSION CONTOL VALVE 1542619C1)

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
16		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
17		1997073C1		1	BLOCK ASSY. MANIFOLD - hydraulic distribution
18		218-5057		1	HYD CONNECTOR 9/16"-18, 37º x 9/16"-18, O-Ring ADAPTER - straight, 9/16-18 inch flare x O-ring boss
20		1997072C1		1	SOLENOID - 3-way
21		218-5135		1	ELBOW 45º, 9/16"-18, 37º x 9/16"-18, O-Ring - 45 degree, 9/16-18 inch flare x adj O-ring boss
23		1997077C1		1	TUBE - brake dump
24		1997075C1		1	FITTING TEE - special, brake dump
25		218-5135		3	ELBOW 45º, 9/16"-18, 37º x 9/16"-18, O-Ring - 45 degree, 9/16-18 inch flare x adj O-ring boss
27		1997043C3		1	TUBE - parking brake, at solenoid
28		218-593		1	TEE 9/16"-18, 37º - 9/16-18 inch flare branch x flare x flare
29		1997023C2		2	TUBE 9.52 mm OD - parking brake, tee to brake housing
30		1997012C1		1	TEE FITTING - special, front of transmission
31		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
32		1997107C1		2	TUBE 9.52 mm OD - special fitting, to tee at brake housing
33		218-5182		2	TEE 9/16"-18, 37º x 9/16"-18, O-Ring Br
35		1997029C1		2	TUBE 9.52 mm OD - track lube
36		218-5105		2	ELBOW 90º, 9/16"-18, 37º x 9/16"-18, O-Ring - 90 degree, 9/16-18 inch flare x adj O-ring boss
38		1997025C2		2	TUBE 12.7 mm OD - low track
39		1997021C2		2	TUBE 12.7 mm OD - high track
40		G108276		1	TUBE 0.5" OD - reverse
41		218-444		1	HYD CONNECTOR 3/4"-16, 37º x 3/8"-18, NPTF ADAPTER - straight, 3/4-16 flare x 3/8 inch PT

****NOTE: Used on P.I.N. JJG0214705 and before, and on P.I.N. JJG0214716, and on P.I.N.\xd5 s JJG0214733 through JJG0214736.**

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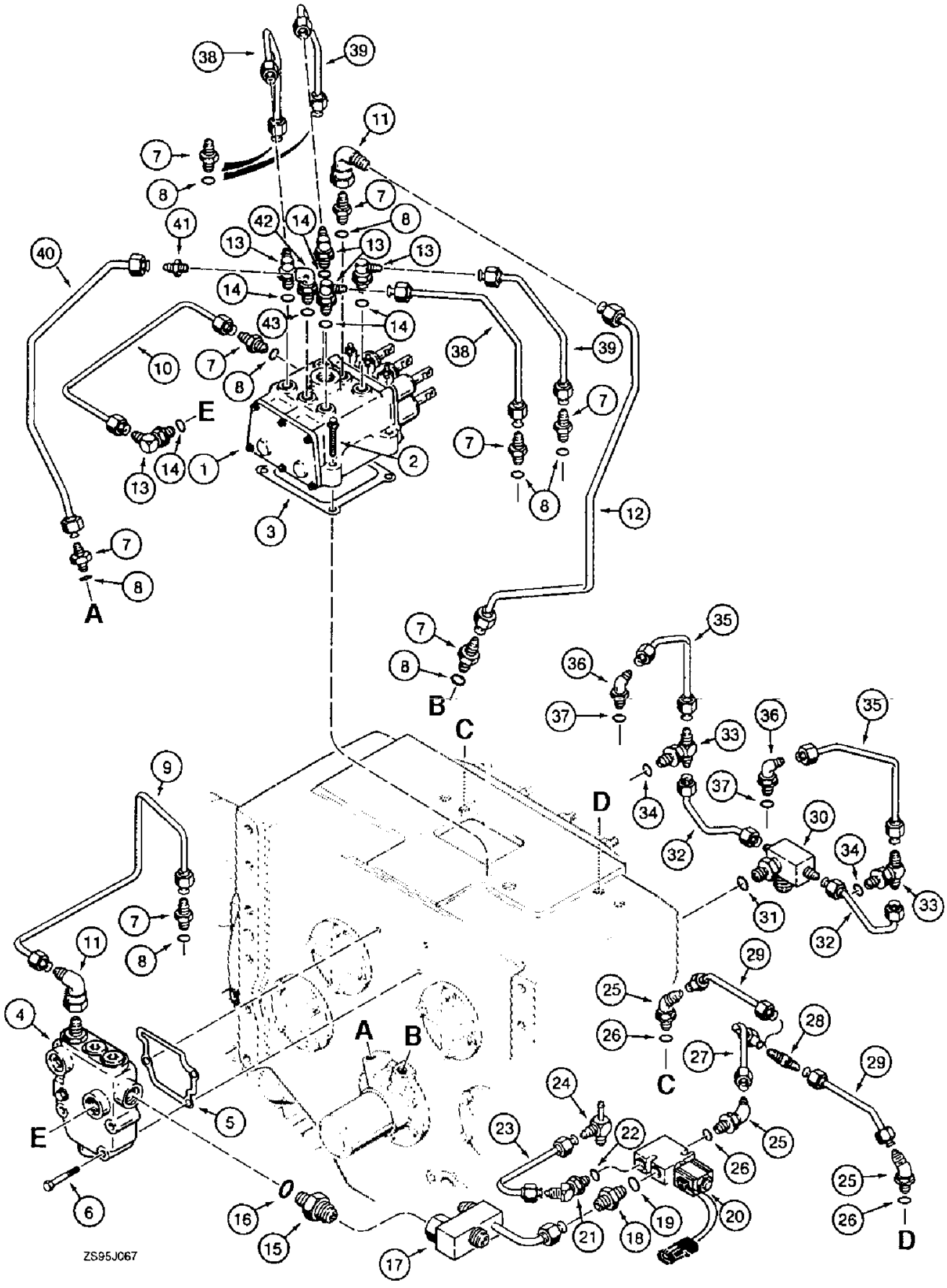
TRANSMISSION HYDRAULIC LINES, **(WITHOUT MODULATOR IN TRANSMISSION CONTOL VALVE 1542619C1)



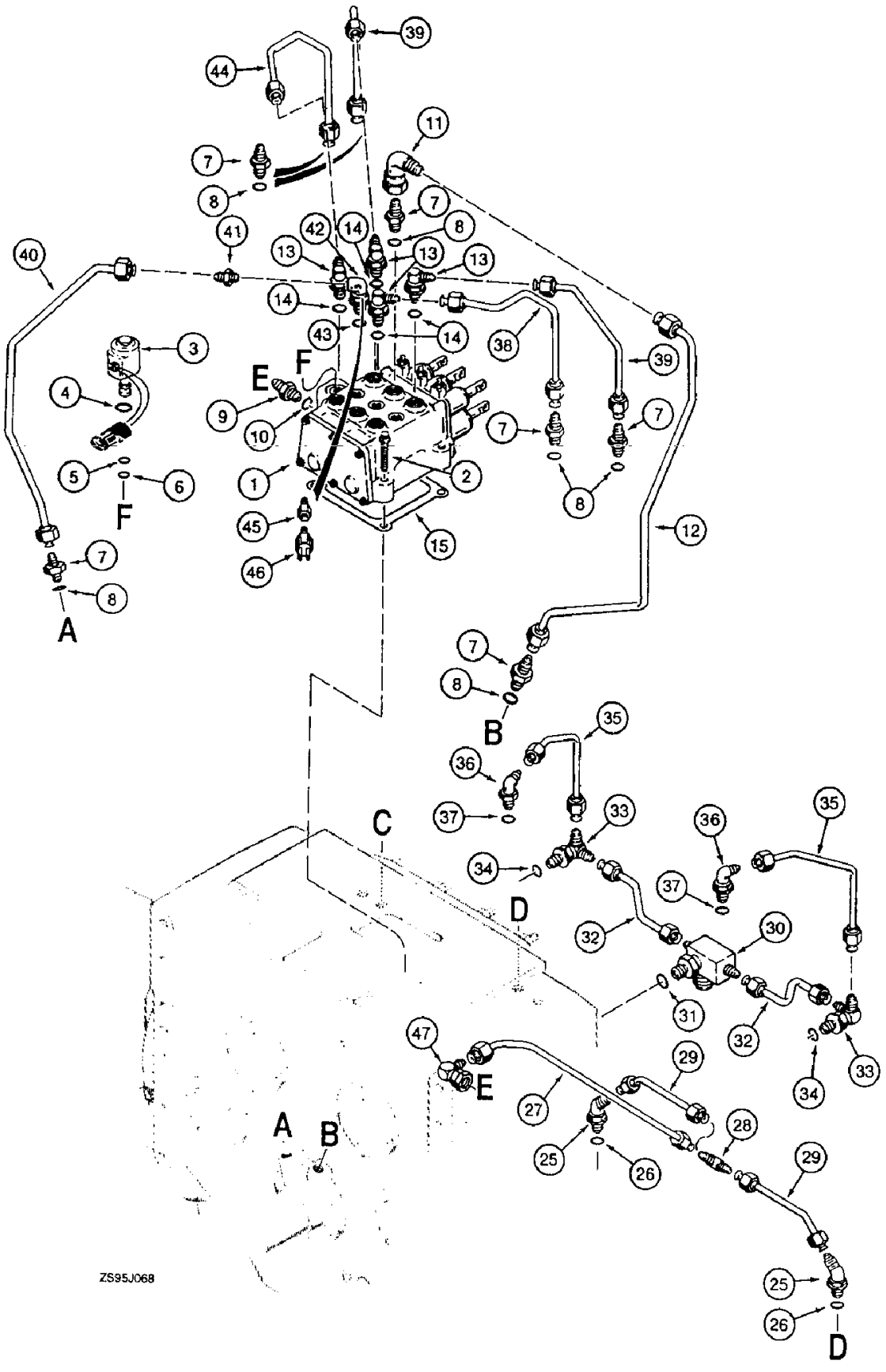
TRANSMISSION HYDRAULIC LINES, **(WITHOUT MODULATOR IN TRANSMISSION CONTOL VALVE 1542619C1)

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
42		G107178		1	ELBOW - 90 degree, special, tapped for backup alarm switch plumbing
43		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
	1	138971A1		1	SEAL KIT KIT - seal, transmission, Includes: Refs 3 and 5.
19		237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk
22		237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk
26		237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk
34		237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk
37		237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk

(1) Used on P.I.N. JJG0214705 and before, and on P.I.N. JJG0214716, and on P.I.N.\xd5 s JJG0214733 through

****NOTE: Used on P.I.N. JJG0214705 and before, and on P.I.N. JJG0214716, and on P.I.N.\xd5 s JJG0214733 through JJG0214736.**

TRANSMISSION HYDRAULIC LINES, **(WITH MODULATOR IN TRANSMISSION CONTROL VALVE 125588A4)

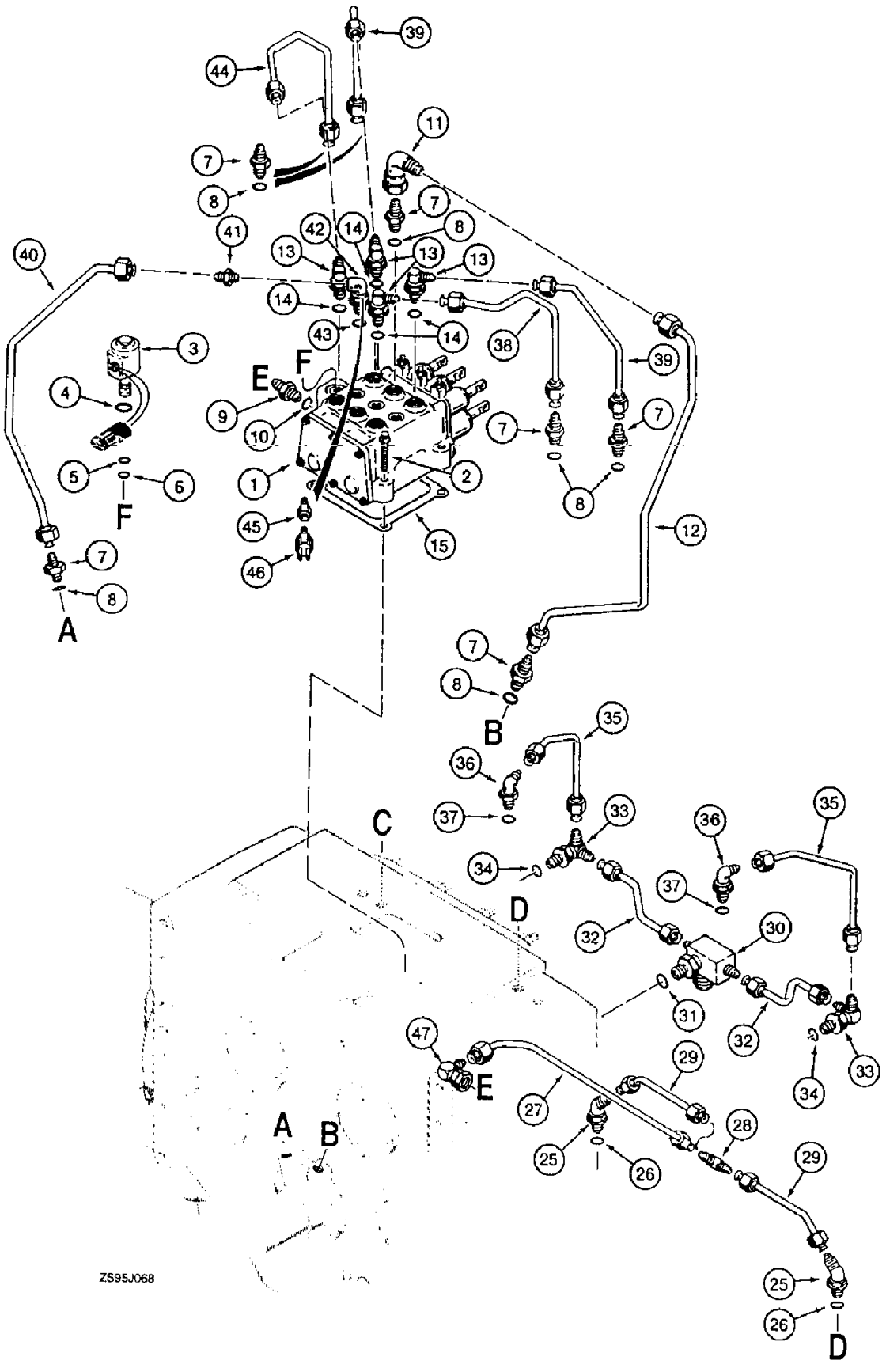


TRANSMISSION HYDRAULIC LINES, **(WITH MODULATOR IN TRANSMISSION CONTROL VALVE 125588A4)

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		REF		1	INSTRUCTION TRANSMISSION ASSEMBLY - see Figure 6-08 for correct assembly
1		125588A4		1	VALVE ASSEMBLY - transmission control, with modulator, parts list figure 6-32
2		180-607		4	12 PT SCREW 12 Pt Flg, 3/8"-16 x 2", G8 BOLT, 12 Pt Flg, 3/8"-16 x 2", G8
		110415A1		1	SOLENOID VALVE ASSEMBLY - solenoid, 12 volt
3		NSS		1	NOT SERVICED SEPARATELY VALVE - solenoid, 12 volt
4		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
5		238-5014		1	O-RING 0.489" ID x 0.629" OD x 0.07" -014, 70 Duro, .489" ID x .070" Thk
6		238-5013		1	O-RING 0.426" ID x 0.566" OD x 0.07" -013, 70 Duro, .426" ID x .070" Thk
7		218-5059		7	HYD CONNECTOR 3/4"-16, 37º x 3/4"-16, O-Ring ADAPTER - straight, 3/4-16 inch flare x O-ring boss
8		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
9		218-5352		1	HYD CONNECTOR 9/16"-18, 37º x 7/16"-20, O-Ring ADAPTER - straight, 9/16-18 flare x 7/16-20 inch O-ring boss
10		237-6004		1	O-RING 0.351" ID 4-1, 90 Duro, .351" ID x .072" Thk
11		218-5230		1	ELBOW 90º, 3/4"-16, 37º x 3/4"-16, 37º Fem Sw - 90 degree, 3/4-16 inch flare x swivel
12		1997056C1		1	TUBE - forward
13		218-5106		4	ELBOW 90º, 3/4"-16, 37º x 3/4"-16, O-Ring - 90 degree, 3/4-16 inch flare x adj O-ring boss

****NOTE: Used on P.I.N.\xd5 s JJG 0214706 through JJG0214715, and on P.I.N.\xd5 s JJG0214717 through JJG0214732, and on P.I.N.\xd5 s JJG0214737 and after.**

TRANSMISSION HYDRAULIC LINES, **(WITH MODULATOR IN TRANSMISSION CONTROL VALVE 125588A4)



TRANSMISSION HYDRAULIC LINES, **(WITH MODULATOR IN TRANSMISSION CONTROL VALVE 125588A4)

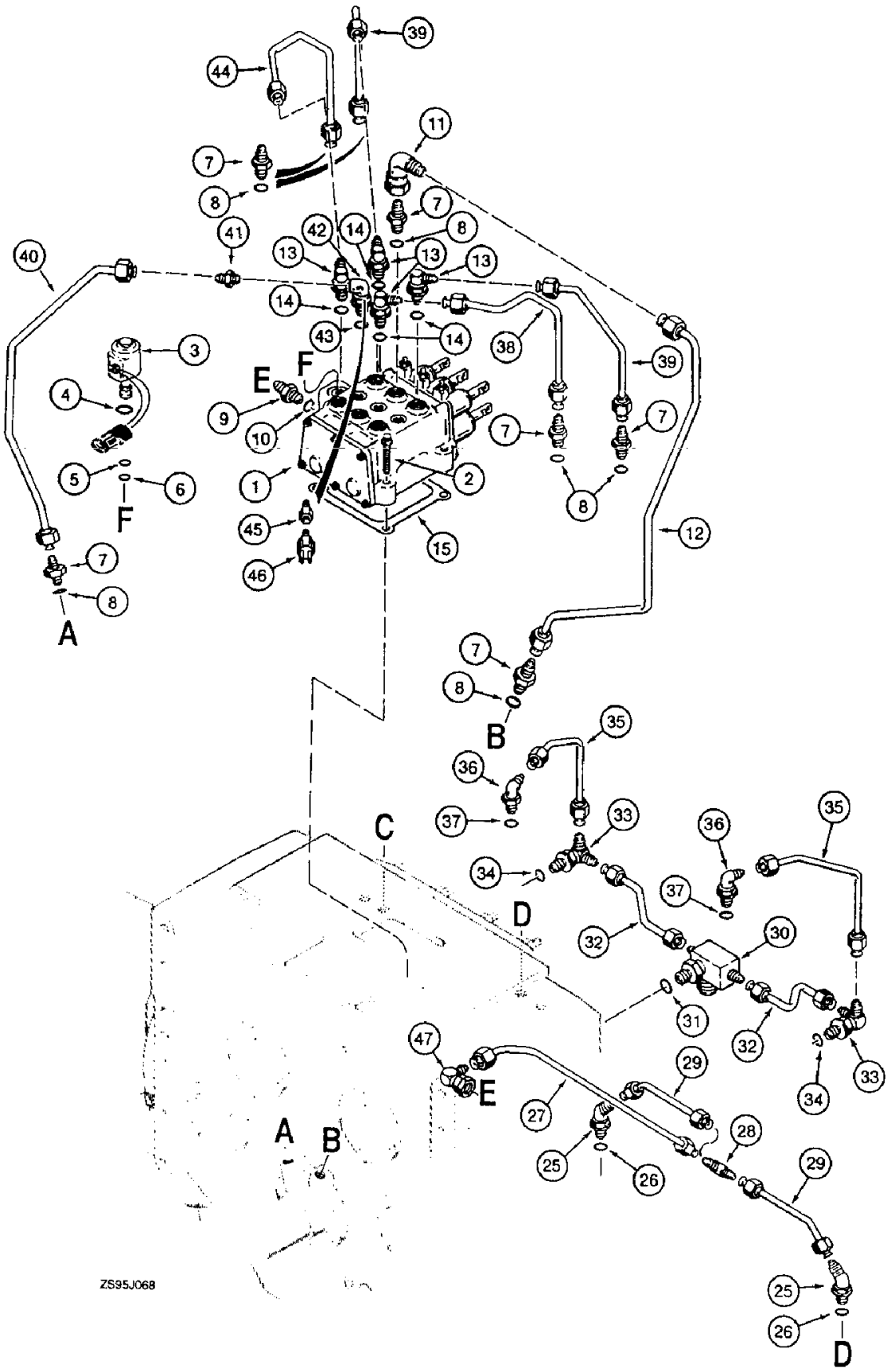
REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
14		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
15	1,2	1986527C1		1	GASKET -
25		218-5135		2	ELBOW 45º, 9/16"-18, 37º x 9/16"-18, O-Ring - 45 degree, 9/16-18 inch flare x adj O-ring boss
26		237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk
27		140920A2		1	TUBE 9.25 mm OD, 208.2, 150.5 mm Length - parking brake supply
28		218-593		1	TEE 9/16"-18, 37º - 9/16-18 inch adj O-ring branch x flare x flare
29		1997023C2		2	TUBE 9.52 mm OD - parking brake, tee to brake housing
30		1997012C1		1	TEE FITTING - special, front of transmission
31		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
32		1997107C1		2	TUBE 9.52 mm OD - special fitting, to tee at brake housing
33		218-5182		2	TEE 9/16"-18, 37º x 9/16"-18, O-Ring Br
34		237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk
35		1997029C1		2	TUBE 9.52 mm OD - track lube
36		218-5105		2	ELBOW 90º, 9/16"-18, 37º x 9/16"-18, O-Ring - 90 degree, 9/16-18 inch flare x adj O-ring boss
37		237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk
38		135916A1		2	TUBE 12.7 mm OD, 222.6, 148.1 mm Length - low track, right hand
39		1997021C2		2	TUBE 12.7 mm OD - high track
40		G108276		1	TUBE 0.5" OD - reverse
41		218-444		1	HYD CONNECTOR 3/4"-16, 37º x 3/8"-18, NPTF ADAPTER - straight, 3/4-16 flare x 3/8 inch PT

(1) Part of KIT, part number 138971A1

(2) Used on P.I.N.\xd5 s JJG 0214706 through JJG0214715, and on P.I.N.\xd5 s JJG0214717 through JJG0214732,

****NOTE: Used on P.I.N.\xd5 s JJG 0214706 through JJG0214715, and on P.I.N.\xd5 s JJG0214717 through JJG0214732, and on P.I.N.\xd5 s JJG0214737 and after.**

TRANSMISSION HYDRAULIC LINES, **(WITH MODULATOR IN TRANSMISSION CONTROL VALVE 125588A4)



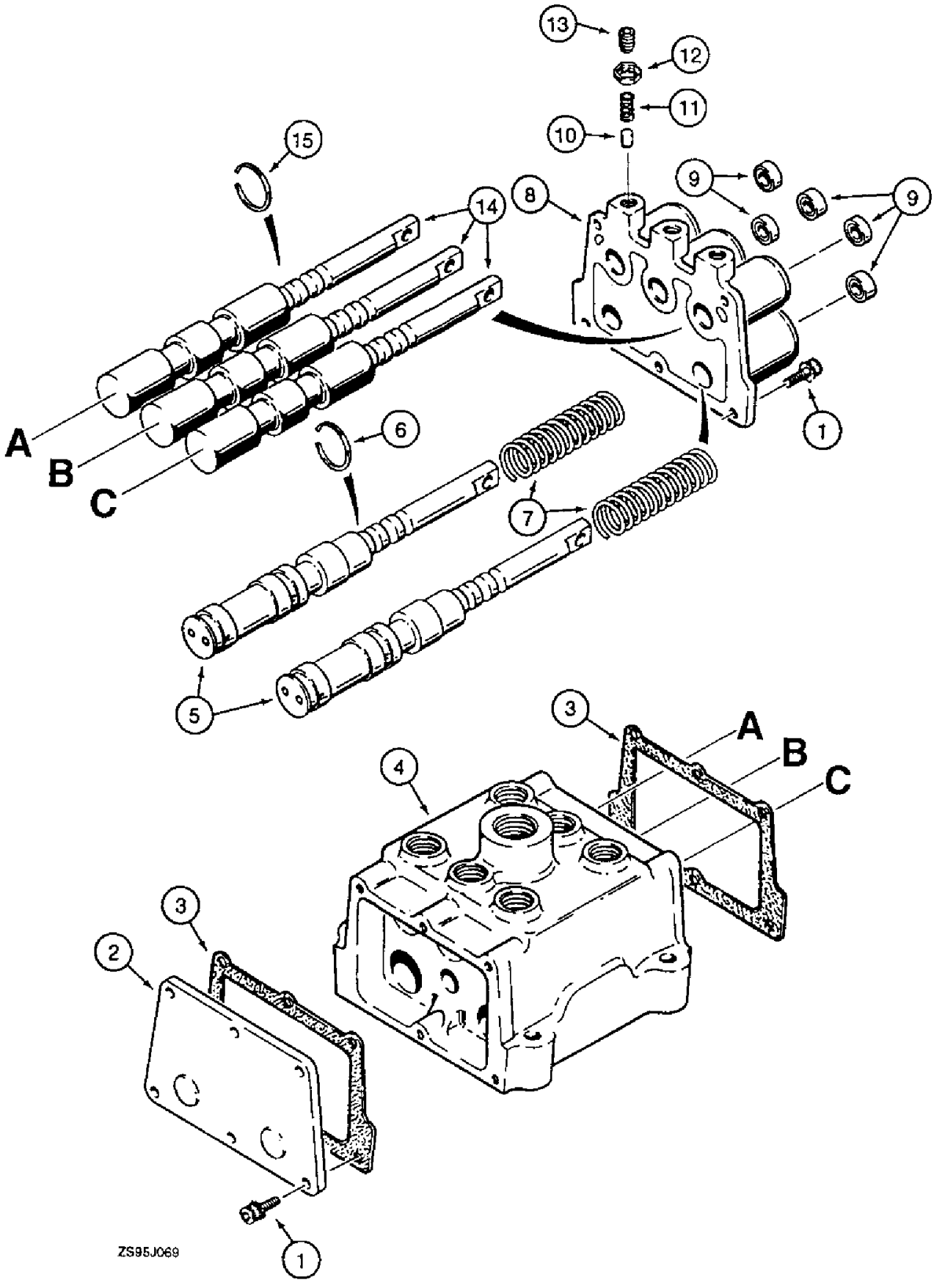
TRANSMISSION HYDRAULIC LINES, **(WITH MODULATOR IN TRANSMISSION CONTROL VALVE 125588A4)

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
42		G107178		1	ELBOW - 90 degree, special, tapped for backup alarm switch plumbing
43		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
44		135918A1		1	TUBE 12.7 mm OD, 222.6, 148.1 mm Length - low track, left hand
45		R52651		1	FITTING SNUBBER - pressure switch
46		D139904		1	SWITCH - pressure, backup alarm, see figure 4-28
47		218-980		1	ELBOW 90º, 9/16"-18, 37º x 9/16"-18, 37º Fem Sw - 90 degree, 9/16-18 inch flare x swivel flare
	1	138971A1		1	SEAL KIT KIT - seal, transmission, Includes: Ref. 15.

(1) Used on P.I.N.\xd5 s JJG 0214706 through JJG0214715, and on P.I.N.\xd5 s JJG0214717 through JJG0214732,

****NOTE: Used on P.I.N.\xd5 s JJG 0214706 through JJG0214715, and on P.I.N.\xd5 s JJG0214717 through JJG0214732, and on P.I.N.\xd5 s JJG0214737 and after.**

TRANSMISSION CONTROL VALVE ASSEMBLY, * WITHOUT MODULATOR

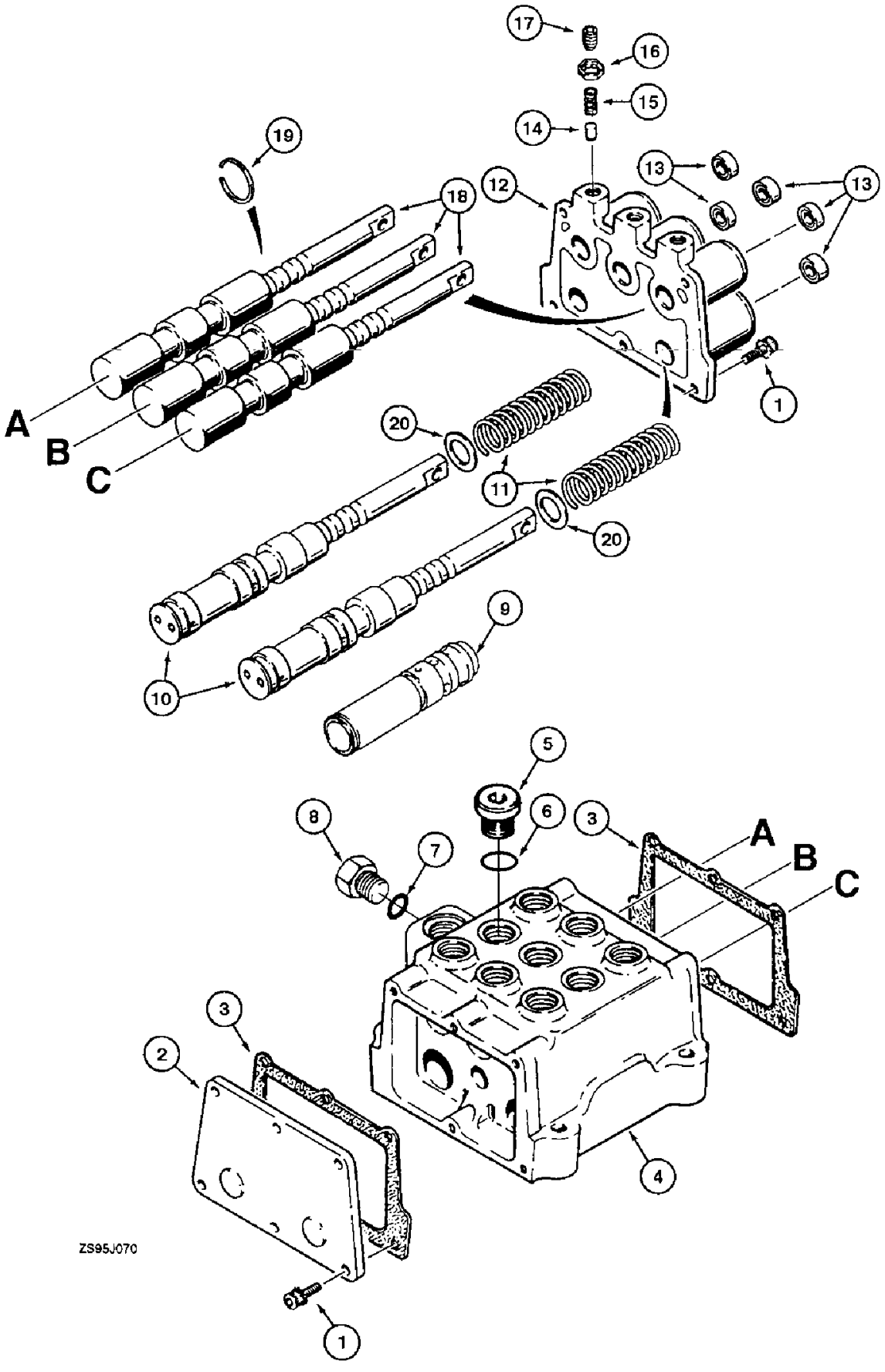


TRANSMISSION CONTROL VALVE ASSEMBLY, * WITHOUT MODULATOR

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		1542619C1		1	VALVE ASSEMBLY - transmission control, for transmissions 1342916C2 and 1342918C2, see figure 6-8
1		193-511		11	HEX SOC SCREW SEMS, Soc Hd, 1/4"-28 x 5/8" SCREW - external tooth lock, 1/4 NF x 5/8 inch, with lock washer
2		R21384		1	COVER - rear
3		35665		2	GASKET - cover
4		NSS		1	NOT SERVICED SEPARATELY BODY - control valve
5		1542596C1		2	SPOOL ASSEMBLY - clutch cutout
6		G107637		1	RING, SNAP RING - retaining, clutch cutout spool
7		1542573C1		2	SPRING - clutch cutout spool
		1542672C1		1	COVER ASSEMBLY - front
8		NSS		1	NOT SERVICED SEPARATELY COVER - front
9		G105700		5	OIL SEAL - oil, double lip
10		71120		3	VALVE PIN - dowel
11		1542824C1		3	SPRING - poppet, detent
12		131-407		3	LOCK NUT PAL, 3/8"-16 NUT - hex, self-locking, 3/8"-16 NC
13		G104208		3	SET SCREW SCREW - set, special, hex socket, oval point, sealant coated
14		G107659		3	ROD SPOOL ASSEMBLY - shift
15		G107637		1	RING, SNAP RING - retaining, shift spool

***NOTE: This transmission control valve without internal modulation was used on crawlers P.I.N. JJG0214705 and before, and on P.I.N. JJG0214716, and on P.I.N.\xd5 s JJG0214733 through JJG0214736.**

TRANSMISSION CONTROL VALVE ASSEMBLY, * WITH MODULATOR

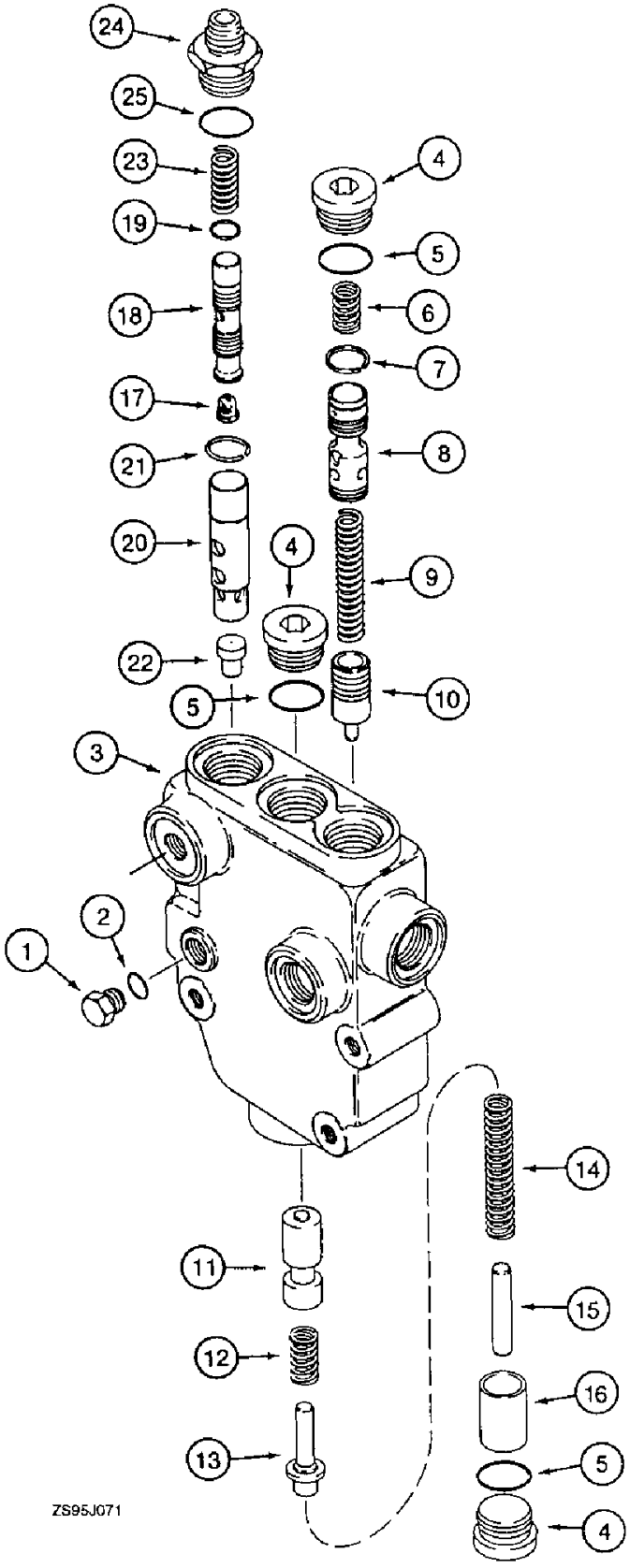


TRANSMISSION CONTROL VALVE ASSEMBLY, * WITH MODULATOR

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		125588A4		1	VALVE ASSEMBLY - transmission control, for transmissions 130727A1 and 130728A1, see figure 6-8
1		193-511		11	HEX SOC SCREW SEMS, Soc Hd, 1/4"-28 x 5/8" SCREW - external tooth lock, 1/4 NF x 5/8 inch, with lock washer
2		R21384		1	COVER - rear
3		35665		2	GASKET - cover
4		NSS		1	NOT SERVICED SEPARATELY BODY - control valve
5		237-6010		3	O-RING 0.239" ID x 0.379" OD x 0.07" PLUG - hex socket, 7/16-20 inch O-ring boss
6		237-6004		1	O-RING 0.351" ID 4-1, 90 Duro, .351" ID x .072" Thk
7		86529630		1	PLUG Hex Soc, 3/8"-24 ORB
8		237-6003		1	O-RING 0.301" ID 3-1, .301" ID x .064" Thk
9		126430A3		1	SPOOL ASSEMBLY - forward/reverse modulation, parts list figure 6-36
10		1542596C1		2	SPOOL ASSEMBLY - clutch cutout, parts list figure 6-38
11		{121865A2}		2	SPRING - clutch cutout spool
		1542672C1		1	COVER ASSEMBLY - front
12		NSS		1	NOT SERVICED SEPARATELY COVER - front
13		G105700		5	OIL SEAL - oil, double lip
14		71120		3	VALVE PIN - dowel
15		1542824C1		3	SPRING - poppet, detent
16		131-407		3	LOCK NUT PAL, 3/8"-16 NUT - hex, self-locking, 3/8"-16 NC
17		G104208		3	SET SCREW SCREW - set, special, hex socket, oval point, sealant coated
18		G107659		3	ROD SPOOL ASSEMBLY - shift
19		G107637		1	RING, SNAP RING - retaining, shift spool
20		495-81175		2	WASHER 21/32" x 1" x .120" if used 21/32" x 1" x .120"

***NOTE: This transmission control valve with internal modulation was used on crawlers P.I.N.\xd5 s JJG 0214706 through JJG0214715, and on P.I.N.\xd5 s JJG0214717 through JJG0214732, and on P.I.N.\xd5 s JJG0214737 and after.**

TRANSMISSION MODULATOR VALVE ASSEMBLY

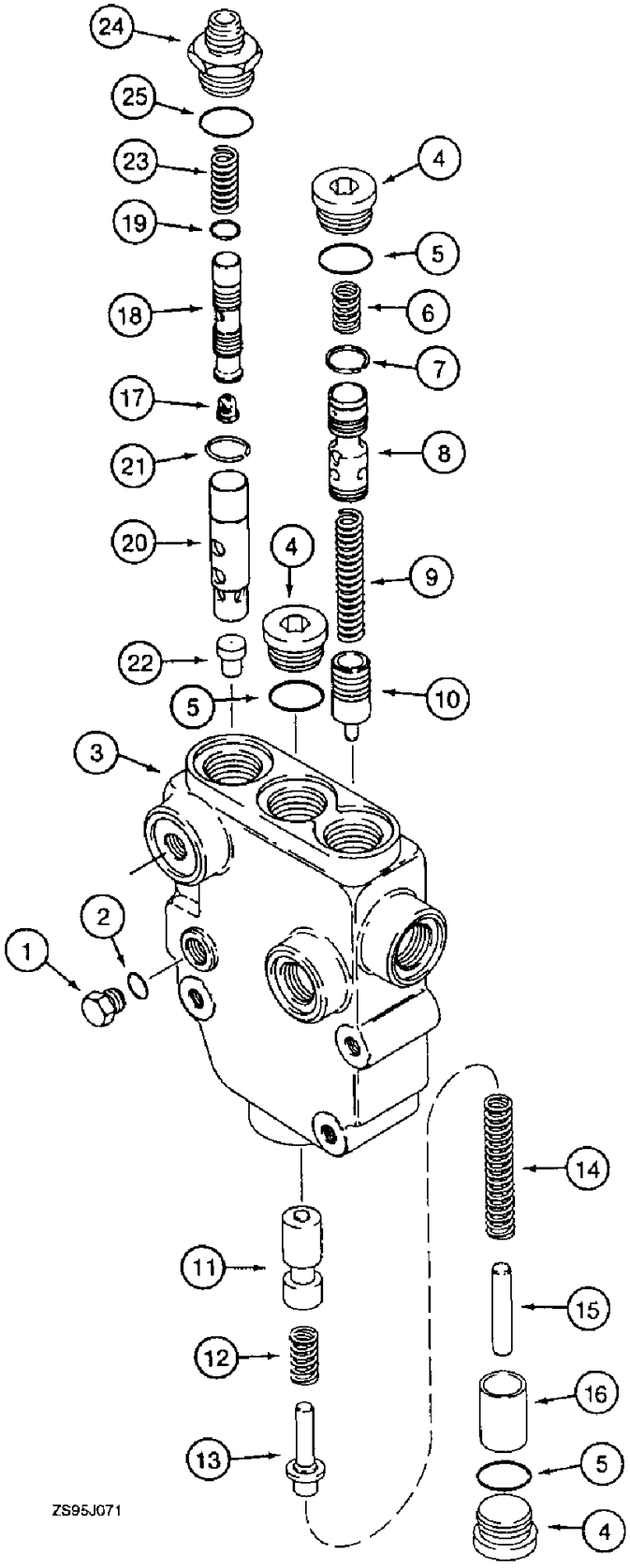


TRANSMISSION MODULATOR VALVE ASSEMBLY

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		1346352C2		1	VALVE ASSEMBLY - modulator, for transmissions 1342916C2 and 1342918C2, see figure 6-8, used with transmission control valve 1542619C1, see figure 6-30
1		9672438		2	PLUG Hex Hd, 7/16"-20 ORB
2		237-6004		1	O-RING 0.351" ID 4-1, 90 Duro, .351" ID x .072" Thk
3		NSS		1	NOT SERVICED SEPARATELY BODY - valve
4		9841223		3	PLUG Hex Soc, 1 1/16"-12 ORB
5		237-6012		1	O-RING 0.924" x 0.116" 12-1, 90 Duro, .924 ID x .116" Thk
6		1986559C1		1	SPRING - track modulation spool
7		1986970C1		1	CIRCLIP RING - retaining
8		1346348C1		1	SPOOL - track modulation
9		1986558C1		1	SPRING - track unloading
10		G106555		1	VALVE POPPET POPPET - unloading, track spool
11		1542519C1		1	SPOOL - modulator
12		1542860C1		1	SPRING - modulator spool
13		G107531		1	GUIDE - spring
14		1346480C1		1	SPRING - modulator
15		G107529		1	PIN - stop
16		G107530		1	PISTON - modulator
17		133519C1		1	SCREEN - filter
18		1986972C2		1	SPOOL - flow sensing
19		1986971C1		1	CIRCLIP RING - retaining, flow sensing spool, 13.5 mm ID
20		1986968C2		1	SPOOL SLEEVE - flow sensing spool
21		1986970C1		1	CIRCLIP RING - retaining, sleeve, 18 mm ID
22		1986969C2		1	VALVE POPPET PLUG - orifice
23		1986973C1		1	SPRING - flow sensing
24		218-5070		1	HYD CONNECTOR 3/4"-16, 37º x 1 1/16"-12, O-Ring ADAPTER - straight, 3/4-16 flare x 1-1/16-12 inch O-ring boss, 3/4-16 flare x 1-1/16-12 O-ring

***NOTE: This transmission modulation valve was used on crawlers P.I.N. JJG0214705 and before, and on P.I.N. JJG0214716, and on P.I.N.\xd5 s JJG0214733 through JJG0214736.**

TRANSMISSION MODULATOR VALVE ASSEMBLY



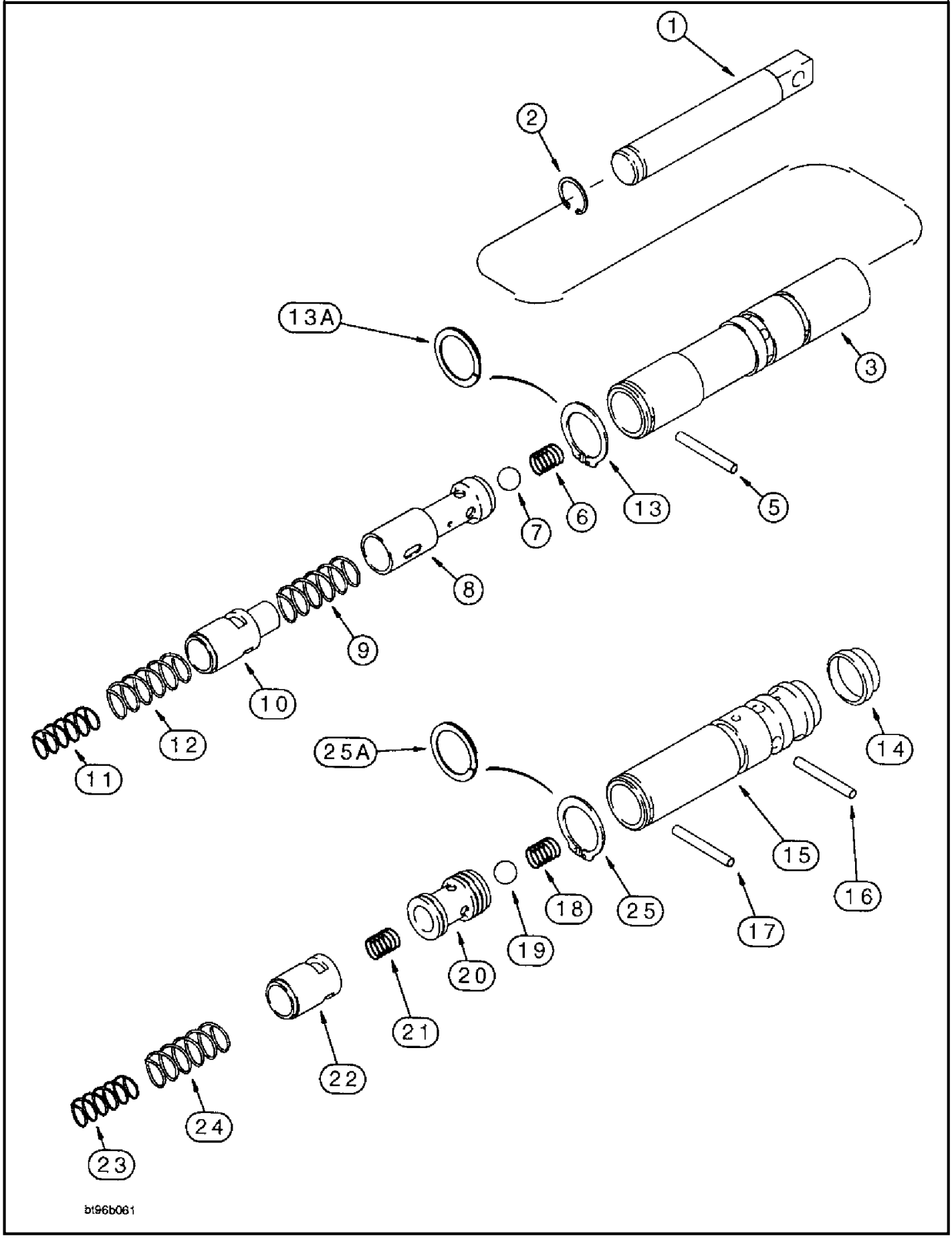
TRANSMISSION MODULATOR VALVE ASSEMBLY

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
25		237-6012		1	O-RING 0.924" x 0.116" 12-1, 90 Duro, .924 ID x .116" Thk

***NOTE: This transmission modulation valve was used on crawlers P.I.N. JJG0214705 and before, and on P.I.N. JJG0214716, and on P.I.N.\xd5 s JJG0214733 through JJG0214736.**

550E

TRANSMISSION CONTROL VALVE SPOOL ASSEMBLY, CLUTCH CUTOUT SPOOL ASSEMBLY



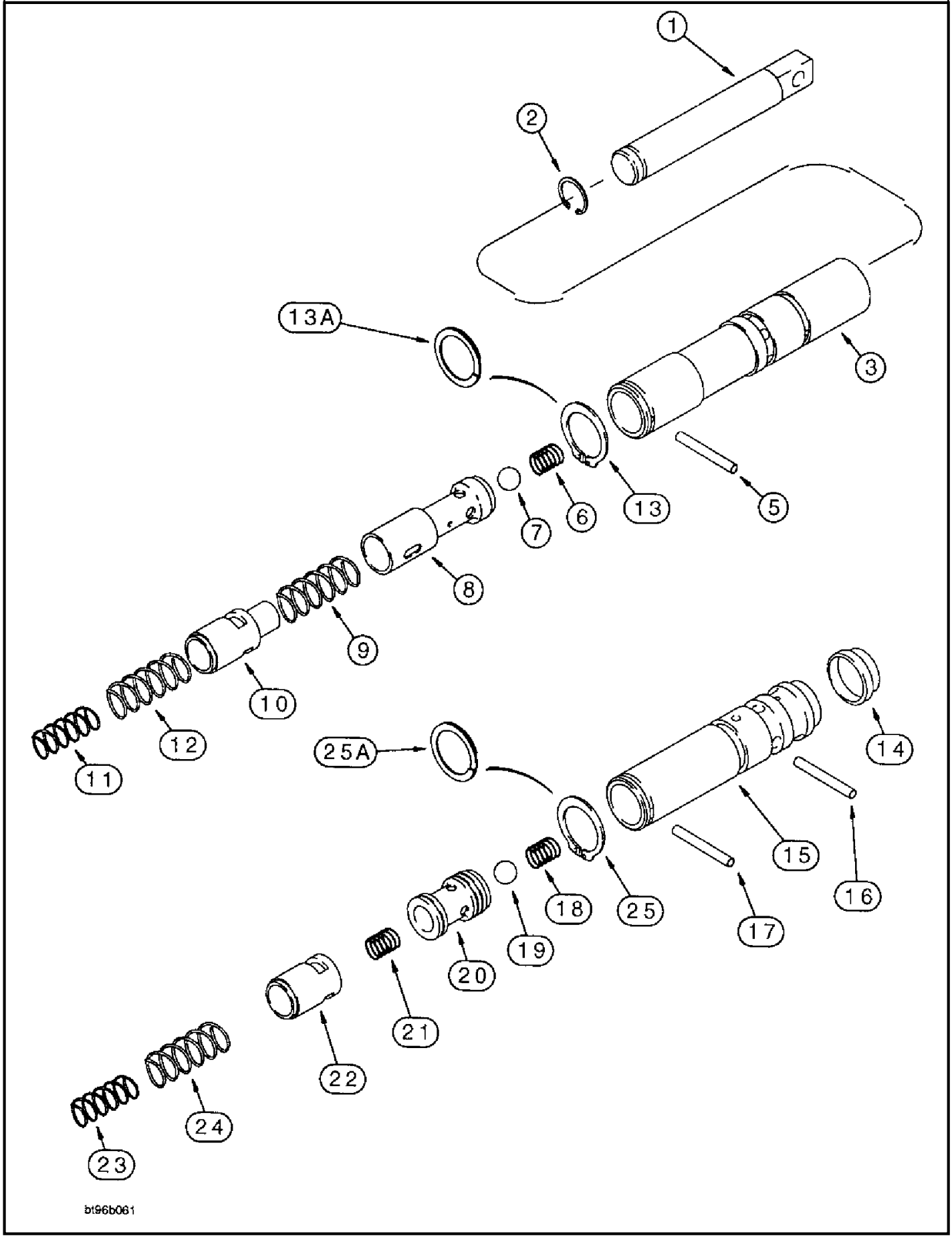
TRANSMISSION CONTROL VALVE SPOOL ASSEMBLY, CLUTCH CUTOUT SPOOL ASSEMBLY

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		189265A2		2	SPOOL ASSEMBLY - clutch cutout, used with transmission control valve 125588A4, see figure 6-32
1		138436A1		1	ROD - spool eye
2		G107637		1	RING, SNAP RING - retaining, spool rod
3		189269A2		1	SPOOL ASSEMBLY - clutch cutout
4		NSS		1	NOT SERVICED SEPARATELY SLEEVE - clutch cutout spool, not shown
5		37-1214		1	DOWEL 1/8" x 7/8" PIN - dowel, 3/8 x 3/4 inch, hardened
6		129700A1		1	SPRING - check valve ball
7		211-1012		1	BALL 3/8" Dia - chrome alloy steel, 3/8 inch, grade 24
8		189267A1		1	SPOOL - track modulation
9		189259A1		1	SPRING -spool return, track reducer
10		189268A1		1	PISTON - track modulation
12		121866A1		1	SPRING - track modulation, outer
13		121493A2		1	RING - retaining, spring and piston, no longer used, see note below
13A	1,2	102-1393		1	SNAP RING #93, Ext, Spiral RING - spiral, retaining, spring and piston
		126430A3		1	SPOOL ASSEMBLY - forward and reverse modulation, used with transmission control valve 125588A4, see figure 6-32
14		121494A1		1	STOP - spool, forward and reverse modulation
15		126255A3		1	SLEEVE - modulation spool, forward and reverse
16		132923A1		1	PIN - retaining, 3.18 x 24 mm long, forward and reverse modulation spool
17		37-1214		1	DOWEL 1/8" x 7/8" PIN - dowel, 3/8 x 3/4 inch, hardened, spring retaining, spool end, forward and reverse modulation

(1) Part of Modification Kit P/N 893117

(2) Use the kit B93117 to update 550E units with P.I.N. JJG0214706 through JJG0214762, except P.I.N. JJG0214716

TRANSMISSION CONTROL VALVE SPOOL ASSEMBLY, CLUTCH CUTOUT SPOOL ASSEMBLY



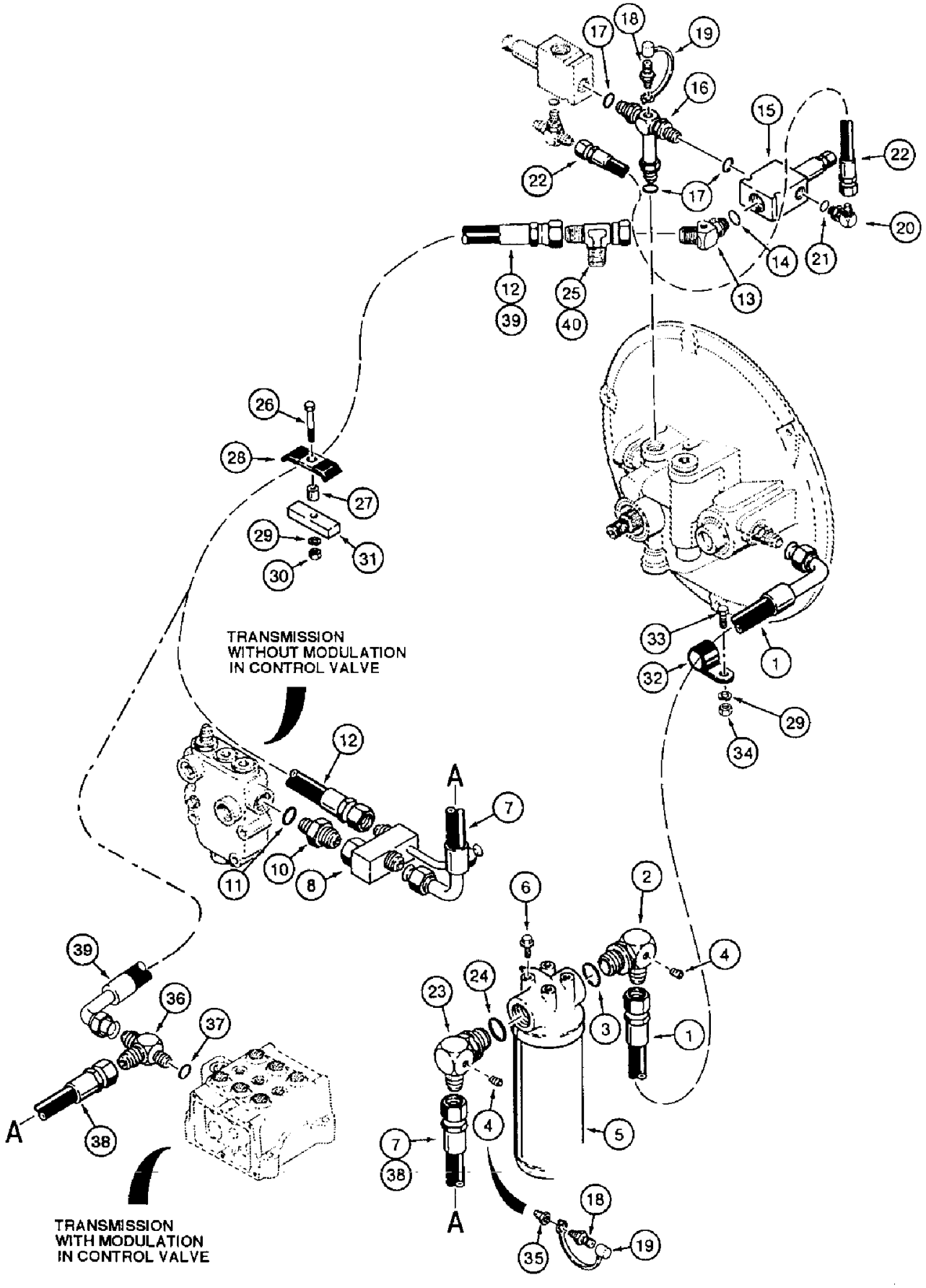
TRANSMISSION CONTROL VALVE SPOOL ASSEMBLY, CLUTCH CUTOUT SPOOL ASSEMBLY

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
18		129700A1		1	SPRING - check valve ball, forward and reverse modulation spool
19		211-1012		1	BALL 3/8" Dia - chrome alloy steel, 3/8 inch, grade 24, forward and reverse modulation spool
20		126252A1		1	SPOOL - forward and reverse modulation
21		127427A1		1	SPRING -spool return, forward and reverse modulation
22		121492A1		1	PISTON - forward and reverse modulation
23		121870A1		1	SPRING - forward and reverse modulation
24		121871A1		1	SPRING - forward and reverse modulation
25		121493A2		1	RING - retaining, spring and piston, no longer used, see note below, forward and reverse modulation spool
25A	1,2	102-1393		1	SNAP RING #93, Ext, Spiral RING - spiral, retaining, spring and piston, forward and reverse modulation spool
	2	B93117		1	MODIFICATION KIT modification, Includes Ref. 13A and 25A, plus 35665 gasket, item 3 Figure 6-32, forward and reverse modulation spool

(1) Part of Modification Kit P/N 893117

(2) Use the kit B93117 to update 550E units with P.I.N.\xd5 s JJG0214706 through JJG0214762, except P.I.N.

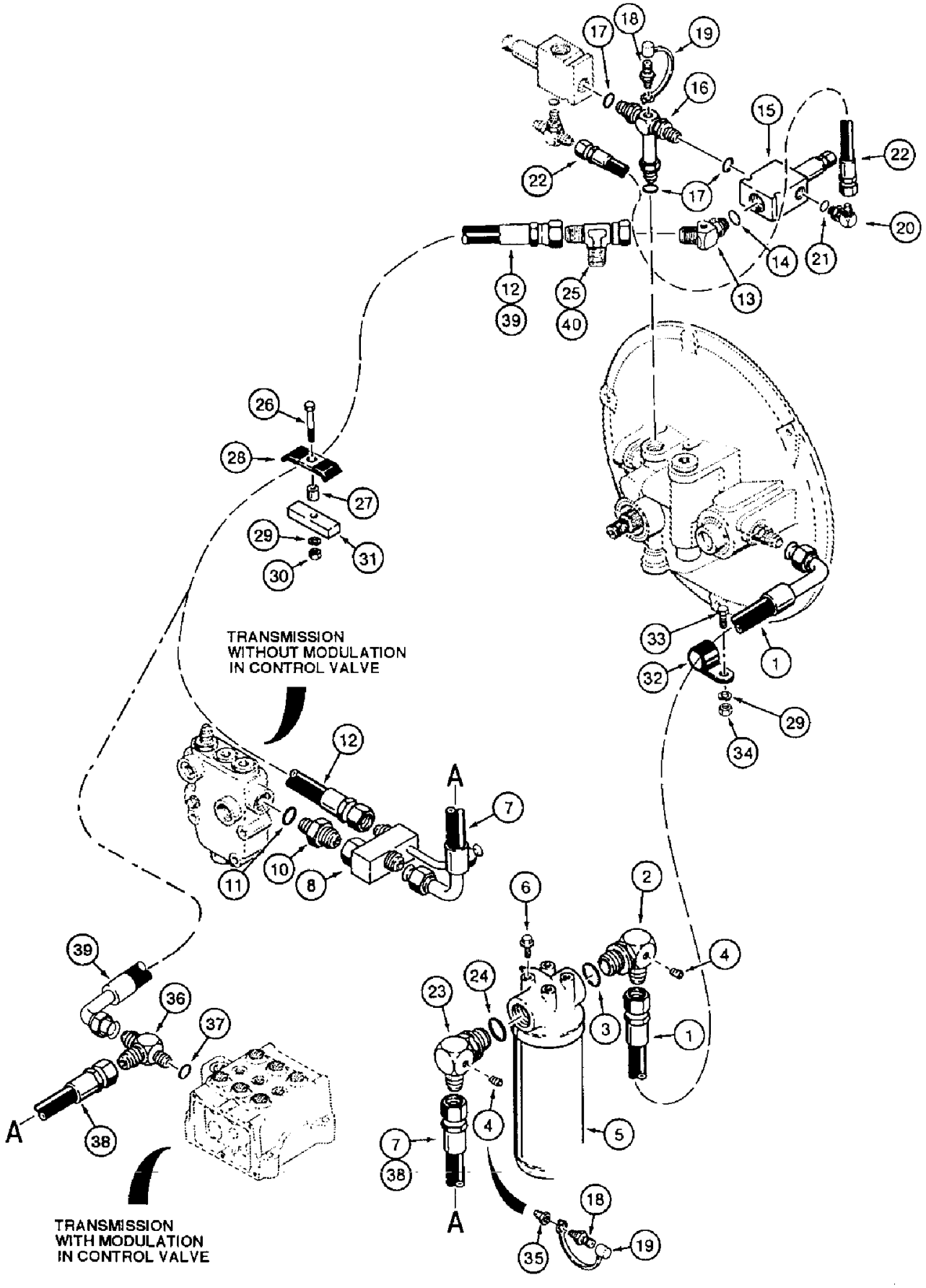
TRANSMISSION HYDRAULIC CIRCUIT, TORQUE CONVERTER TO TRANSMISSION



TRANSMISSION HYDRAULIC CIRCUIT, TORQUE CONVERTER TO TRANSMISSION

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R57653		1	HOSE ASSY. HOSE - 64-5/8 inch (1640 mm) long, torque
2		R49557		1	FITTING ELBOW - 90 degree, with check port, special
3		237-6016		1	O-RING 0.614" ID x 0.754" OD x 0.07" 16-1, 90 Duro, 1.171" ID x .118" Thk
4		217-430		2	PLUG Hex Soc, 1/8"-27 - hex socket, 1/8 inch PT
5		R48993		1	FILTER ASSEMBLY - transmission oil, parts list figure 6-44
6		160-101		4	BOLT Hex Flg, 3/8"-16 x 3/4", G8, Full Thd - hex flange, 3/8 NC x 3/4 inch, grade 8
7		R57656		1	HOSE - 28-3/8 inch (720 mm) long, filter to modulator valve on transmission
8		1997073C1		1	BLOCK ASSY. MANIFOLD - special, hydraulic distribution
10		218-5065		1	HYD CONNECTOR 1 1/16"-12, 37º x 7/8"-14, O-Ring ADAPTER - straight, 1-1/16-12 flare x 7/8-14 inch O-ring boss
11		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
12		H224147		1	HYDRAULIC HOSE 19.05 mm ID x 1320.80 mm, SAE 100R1 Modulator Valve to Relief Valve 19.05 mm ID x 1320.80 mm, SAE 100R1
13		R57596		1	FITTING ELBOW - 45 degree, special, see figure 4-12for transmission oil pressure gauge
14		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
15		R57582		1	VALVE ASSEMBLY - relief, component parts not serviced separately, may order S301087 seal kit below for service of external O-rings

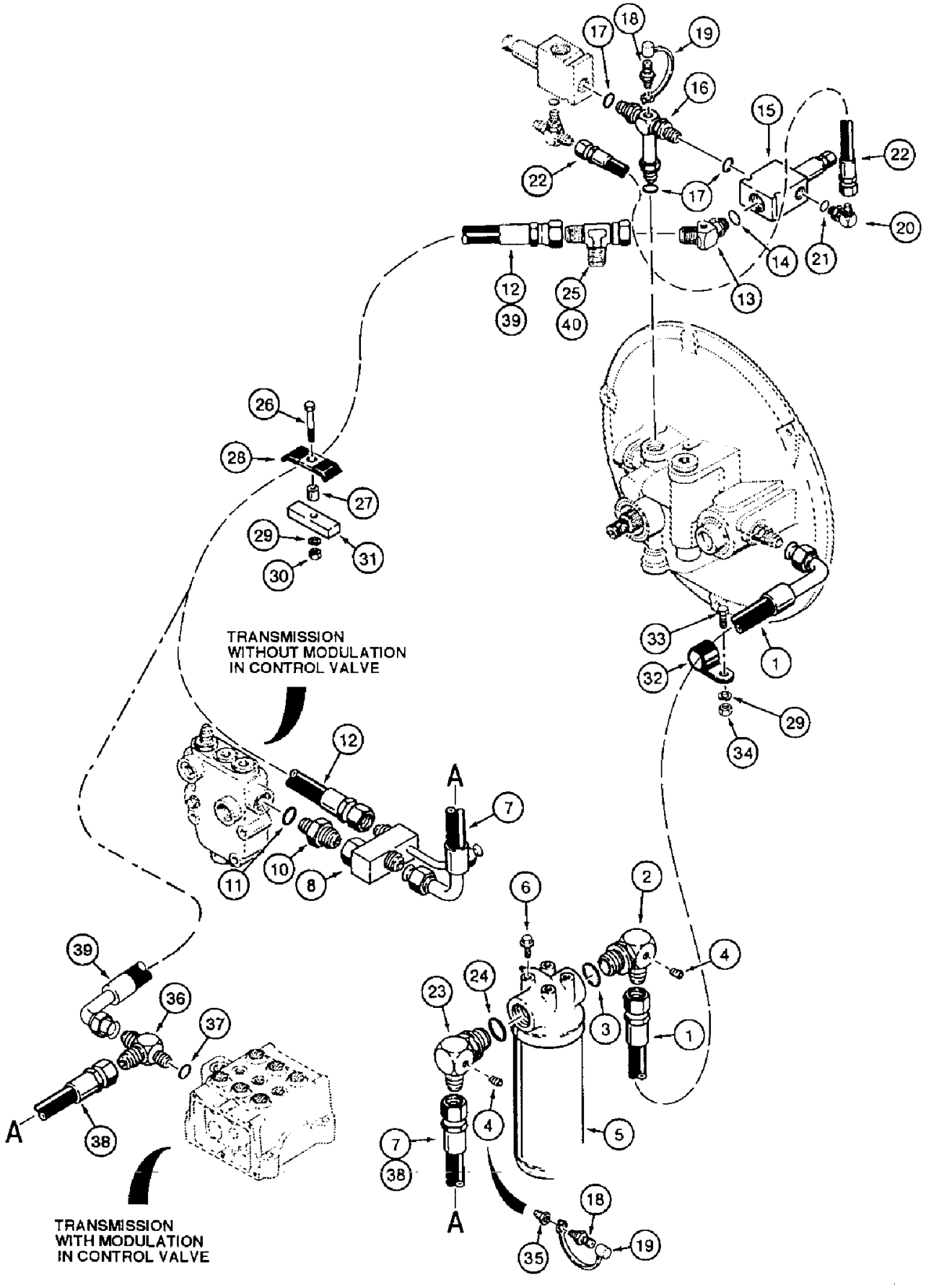
TRANSMISSION HYDRAULIC CIRCUIT, TORQUE CONVERTER TO TRANSMISSION



TRANSMISSION HYDRAULIC CIRCUIT, TORQUE CONVERTER TO TRANSMISSION

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
16		R57585		1	FITTING TEE - special, at torque converter, see figure 6-42 for pressure sensing valve
17		237-6008		3	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
18		H434164		1	COUPLING COUPLER - quick check, diagnostic check
19		H434163		1	DUST CAP CAP - dust, coupler
20		218-5105		1	ELBOW 90º, 9/16"-18, 37º x 9/16"-18, O-Ring - 90 degree, 9/16-18 inch flare x adj O-ring boss
22		L19294		1	HOSE 0.38" ID x 18.75", SAE 100R1 ASSY, , Relief Valve to Pressure Sensing Valve 0.38" ID x 18.75", SAE 100R1
23		E20132		1	FITTING ELBOW - 90 degree, special, with check port
24		237-6016		1	O-RING 0.614" ID x 0.754" OD x 0.07" 16-1, 90 Duro, 1.171" ID x .118" Thk
25		218-5219		1	TEE 37º, 7/8"-14 x 3/4"-16, Fem Sw Run x 3/4"-16 Br - 3/4-16 flare branch x 1-1/16-12 inch flare x swivel, str thread
26		413-644		1	BOLT Hex, 3/8"-16 x 2 3/4", G5 - hex, 3/8 NC x 2-3/4 inch
27		D76208		1	SPACER - hose clamp
28		R15257		2	CLAMP - hose
29		492-11038		2	LOCK WASHER 3/8"
30		231-1446		1	NUT 3/8"-16, GB NUT - hex, self locking, 3/8 inch NC
31		R35857		1	BAR PLATE - clamp
32		92070C1		1	CLAMP 1 1/4", Insul, 7/16" Bolt - P-type, 1-1/4 inch ID
33		413-620		1	BOLT Hex, 3/8"-16 x 1 1/4", G5, Full Thd - hex, 3/8 NC x 1-1/4 inch
34		425-106		1	NUT 3/8"-16, G5
35		217-1084		1	ELBOW 45º, 1/8"-27 Female x 1/8"-27 Male Street 45º, 1/8"-27 Female x 1/8"-27 Male

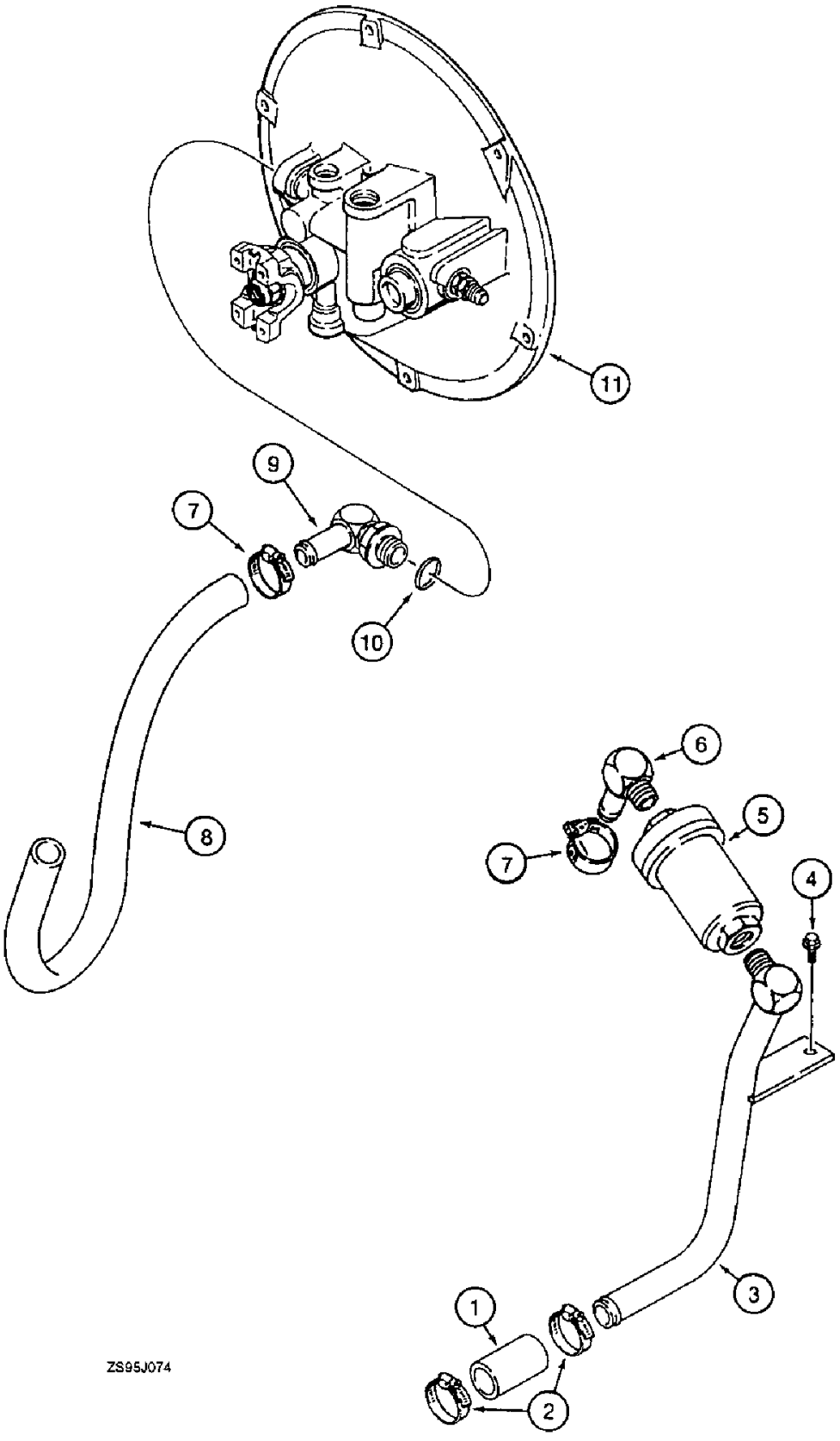
TRANSMISSION HYDRAULIC CIRCUIT, TORQUE CONVERTER TO TRANSMISSION



TRANSMISSION HYDRAULIC CIRCUIT, TORQUE CONVERTER TO TRANSMISSION

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
36		218-5594		1	TEE 37º, 1 1/16"-12, 7/8"-14 O-Ring Run, 1 1/16"-12 - 1-1/16-12 flare branch x flare x 7/8-14 inch adj O-ring, hydraulic distribution
37		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
38		132860A1		1	HOSE - 990 mm long, filter to control valve on transmission
39		178403A1		1	HOSE ASSY. HOSE - 875 mm long, control valve to relief valve
40		218-5221		1	TEE 37º, 1 1/16"-12 x 1 1/16"-12, Fem Sw Run - 1-1/16-12 inch flare branch x flare x adj straight thread
		S301087		1	SEAL KIT KIT - seal repair, contains three O-rings and two backup rings which are not serviced separately
21		237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk

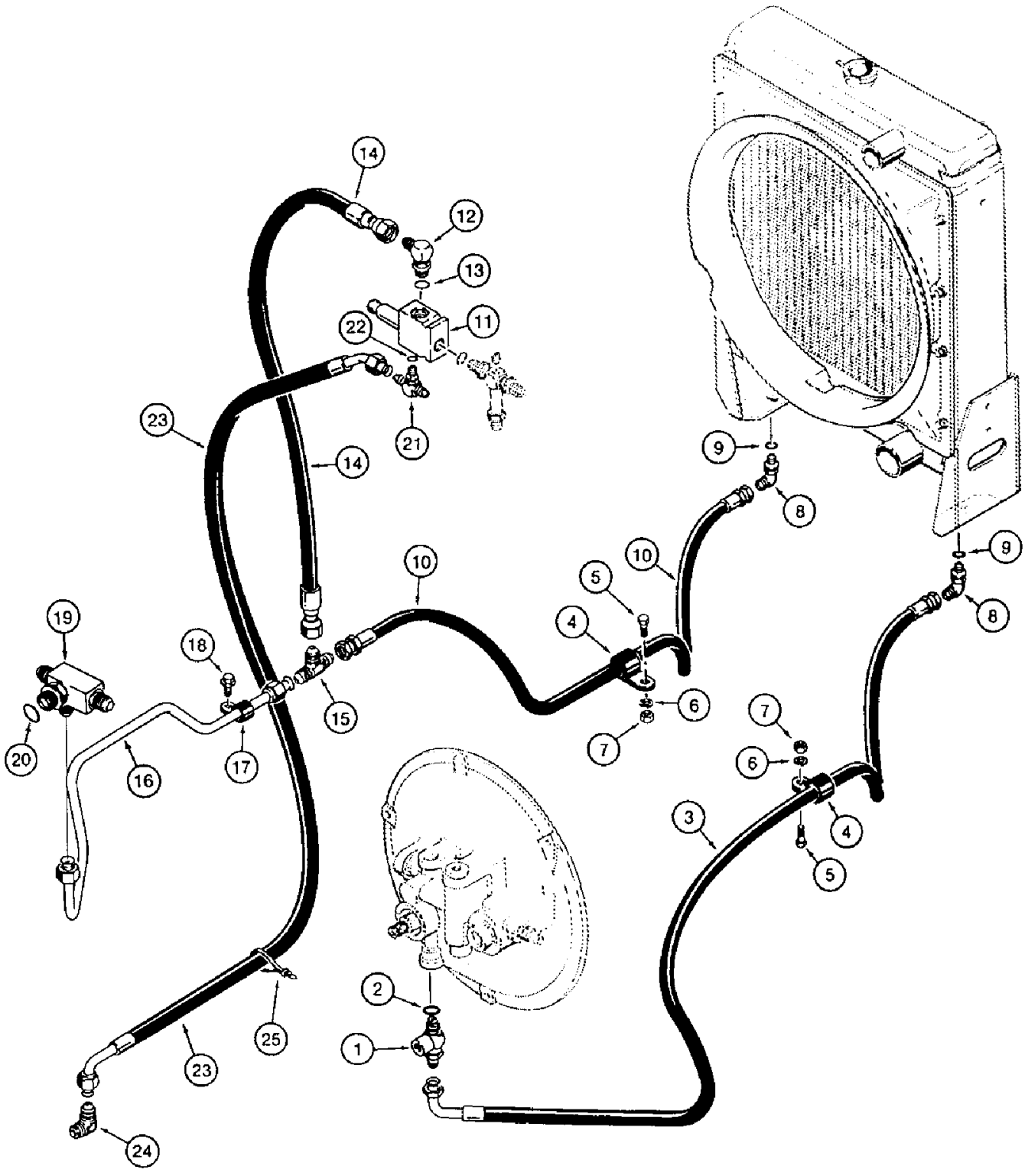
TRANSMISSION HYDRAULIC CIRCUIT, TRANSMISSION SUCTION LINE



TRANSMISSION HYDRAULIC CIRCUIT, TRANSMISSION SUCTION LINE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R13911		1	HOSE 31.80 mm ID x 101.60 mm ID, SAE 100R3 - cut from S118465X bulk hose, see below, suction line at transmission 31.80 mm ID x 101.60 mm ID, SAE 100R3
2		214-3132		2	HOSE CLAMP 1.25/2.125 HD Worm CLAMP - adj, 1-1/4 - 2-1/8 inch dia
3		R58825		1	TUBE 31.75 mm OD - suction line, transmission to filter, bracket bolts to main frame
4		160-101		1	BOLT Hex Flg, 3/8"-16 x 3/4", G8, Full Thd - hex flange, 3/8 NC x 3/4 inch, grade 8, Teflon coated
5		D35144		1	FILTER FILTER ASSEMBLY - transmission oil suction line, parts list figure 6-44
6		R57811		1	FITTING ELBOW - 90 degree, special, at suction filter
7		214-3128		2	HOSE CLAMP 1.00/1.875 HD Worm CLAMP - adj, 1 - 1-7/8 inch dia
8		D23886		1	HOSE - 17 inch (432 mm) long, cut from S118383X bulk hose, suction
9		R56769		1	FITTING ELBOW - stem, special, at torque converter
10		237-6024		1	O-RING 1.114" ID x 1.254" OD x 0.07" 24-1, 90 Duro, 1.72" ID x .118" Thk
11		1348881C2		1	CONVERTER HOUSING ASSEMBLY - torque converter, parts list figure 6-4, pressure line hydraulics on figure 6-38
		S118465X		UAR	LARGE HOSE HOSE - bulk, 1-1/4 (32) x 1-3/4 (45) x 180 inch (4572 mm) long
		S118383X		UAR	LARGE HOSE HOSE - bulk, 1 (25) x 1-1/2 (38) x 192 inch (4877 mm) long

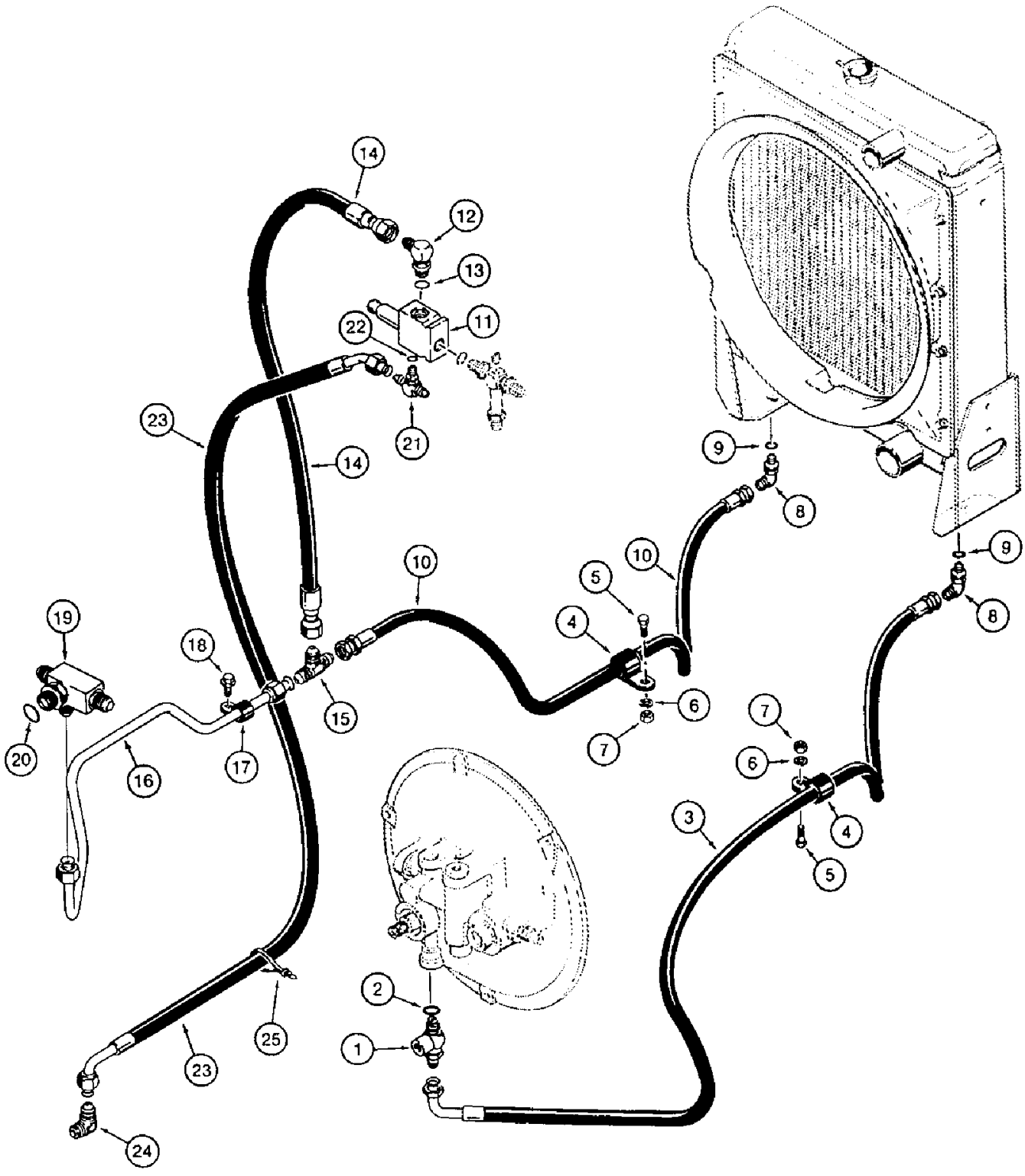
TRANSMISSION HYDRAULIC CIRCUIT, COOLING SYSTEM



TRANSMISSION HYDRAULIC CIRCUIT, COOLING SYSTEM

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R56771		1	FITTING TEE - special, see figure 4-12 for converter temperature gauge
2		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
3		R57654		1	HOSE ASSY. HOSE - 57 inch (1446 mm) long
4		515-23286		2	CLAMP 1 1/8", Insul, 3/8" Bolt P-type 1 1/8", Insul, 3/8" Bolt
5		413-620		2	BOLT Hex, 3/8"-16 x 1 1/4", G5, Full Thd - hex, 3/8 NC x 1-1/4 inch
6		492-11038		2	LOCK WASHER 3/8"
7		425-106		2	NUT 3/8"-16, G5
8		218-5107		2	ELBOW 90º, 7/8"-14, 37º x 7/8"-14, O-Ring - 90 degree, 7/8-14 inch flare x adj O-ring boss
9		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
10		R57655		1	HOSE ASSY. HOSE - 41-3/4 inch (1060 mm) long, cooler return at cooler
11		R57597		1	VALVE - pressure sensing, component parts not serviced separately, may order S301087 seal kit below for service of external O-rings
12		218-5117		1	ELBOW 90º, 7/8"-14, 37º x 3/4"-16, O-Ring - 90 degree, 7/8-14 flare x 3/4-16 inch adj O-ring boss, adj O-ring
13		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
14		R57652		1	HOSE ASSY. HOSE - 22-3/4 inch (575 mm) long, pressure sensing
15		218-1580		1	TEE 37º, 1 1/16"-12 x 7/8"-14, Br - 7/8-14 flare branch x 1-1/16-12 inch flare x flare
16		R58823		1	TUBE 19.05 mm OD - cooler return at transmission
17		515-23190		1	CLAMP 3/4", Insul, 3/8" Bolt P-type 3/4", Insul, 3/8" Bolt

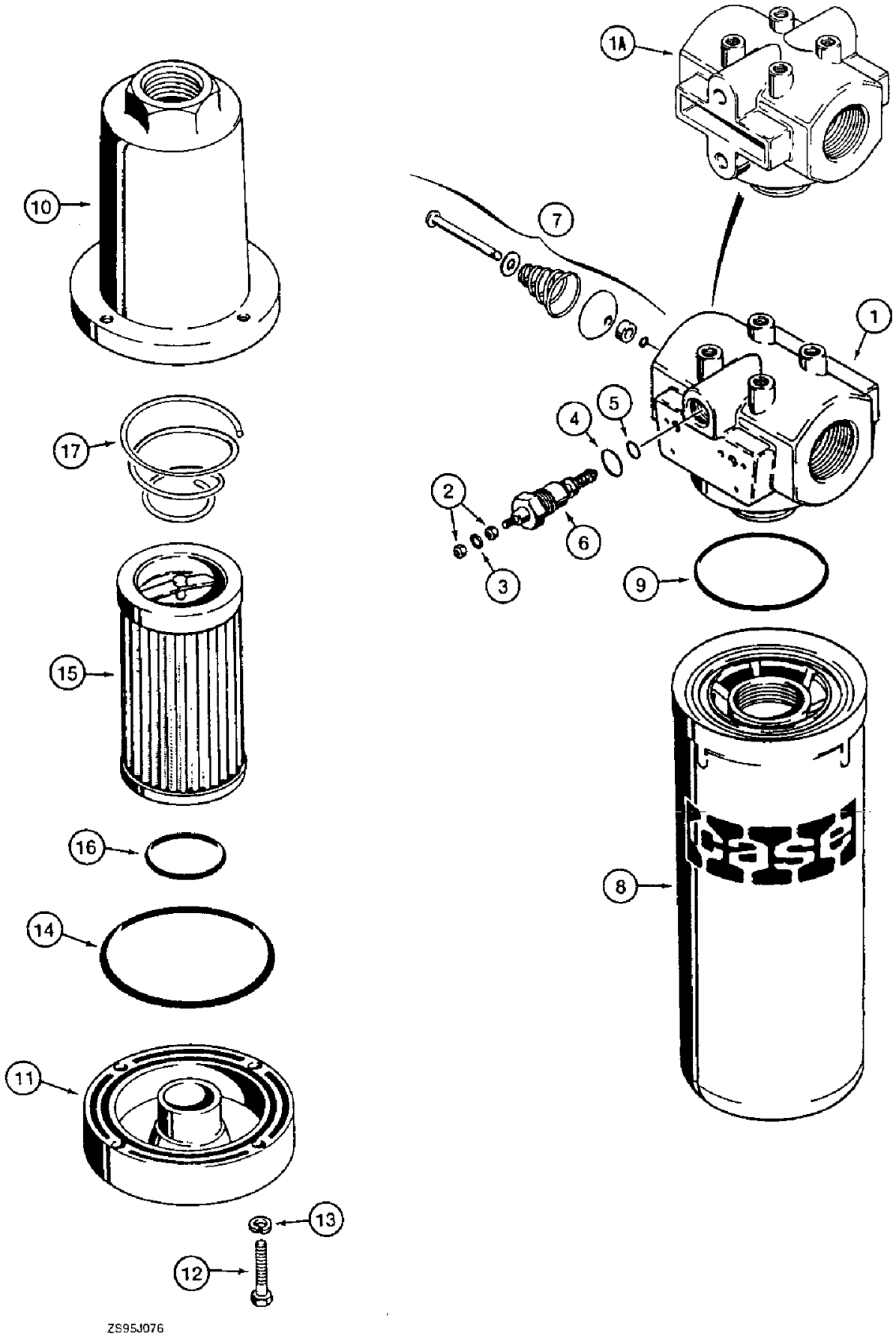
TRANSMISSION HYDRAULIC CIRCUIT, COOLING SYSTEM



TRANSMISSION HYDRAULIC CIRCUIT, COOLING SYSTEM

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
18		160-101		1	BOLT Hex Flg, 3/8"-16 x 3/4", G8, Full Thd - hex flange, 3/8 NC x 3/4 inch, grade 8
19		1997012C1		1	TEE FITTING - special, included with transmission assembly, see figure 6-26 or 6-28, ref 30
20		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
21		218-5182		1	TEE 9/16"-18, 37º x 9/16"-18, O-Ring Br - 9/16-18 inch adj O-ring branch x flare x flare
23		R34863		1	HOSE - 35 inch (889 mm) long, pressure sensing
24		218-533		1	ELBOW 45º, 9/16-18" 37º x 1/4"-18, NPTF
25		L18337		UAR	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon
		S301087		1	SEAL KIT KIT - seal repair, contains three O-rings and two backup rings which are not serviced separately
22		237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk

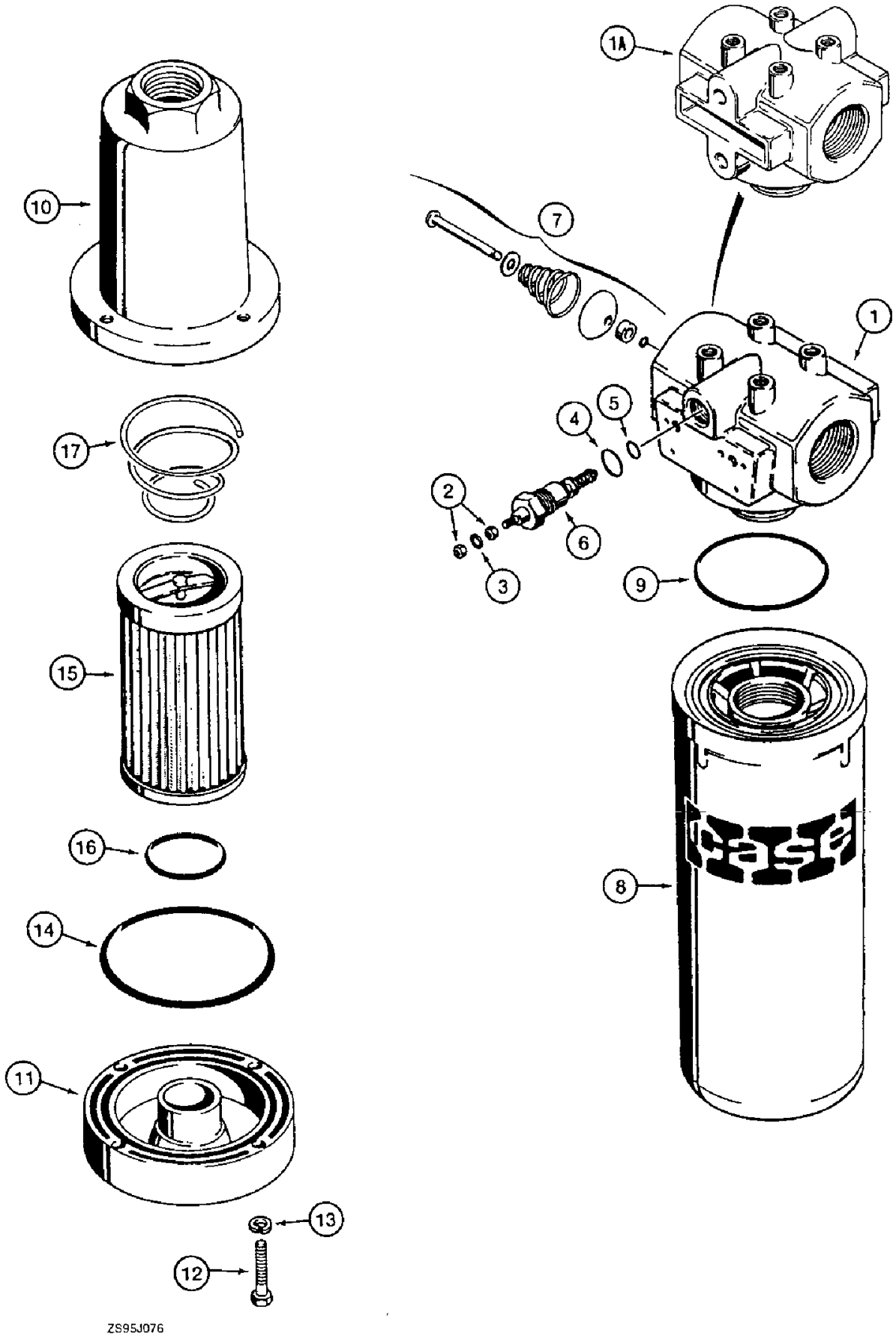
HYDRAULIC OIL FILTERS, R48993 TRANSMISSION OIL FILTER, R50518 EQUIPMENT CIRCUIT OIL FILTER



HYDRAULIC OIL FILTERS, R48993 TRANSMISSION OIL FILTER, R50518 EQUIPMENT CIRCUIT OIL FILTER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		R50518		1	FILTER ASSEMBLY - equipment circuit oil
		R48993		1	FILTER ASSEMBLY - transmission oil
1		NSS		1	NOT SERVICED SEPARATELY HEAD - R48993 filter
1A		NSS		1	NOT SERVICED SEPARATELY HEAD - R50518 filter
		N7929		1	INDICATOR ASSEMBLY - restriction, electric R48993 filter only
2		129-667		2	NUT #10-32, LH
3		493-21020		1	LOCK WASHER Int Tooth, #10 WASHER, LOCK, (3/16") Int Tooth, #10
5		238-5011		1	O-RING 0.301" ID x 0.441" OD x 0.07" -011, 70 Duro, .301" ID x .070" Thk, Inner, small
6		NSS		1	NOT SERVICED SEPARATELY INDICATOR - restriction
7		NSS		1	NOT SERVICED SEPARATELY VALVE - bypass, filter
		1346028C1		1	HYDRAULIC OIL FILTER ELEMENT ASSEMBLY - filter, replacement
8		NSS		1	NOT SERVICED SEPARATELY ELEMENT - filter
9		{N9026}		1	- element
		D35144		1	FILTER FILTER ASSEMBLY - transmission oil, suction line
10		D37033		1	HOUSING - filter, transmission suction line
11		D37034		1	HEAD - filter, transmission suction line
12		413-424		4	BOLT Hex, 1/4"-20 x 1 1/2", G5 Transmission suction line filter Hex, 1/4"-20 x 1 1/2", G5
13		492-11025		4	LOCK WASHER 1/4" WASHER, LOCK, , Transmission suction line filter 1/4"
14		D21006		1	O-RING 3 1/8" ID x 3 3/8" OD x 1/8" - housing, transmission suction line filter

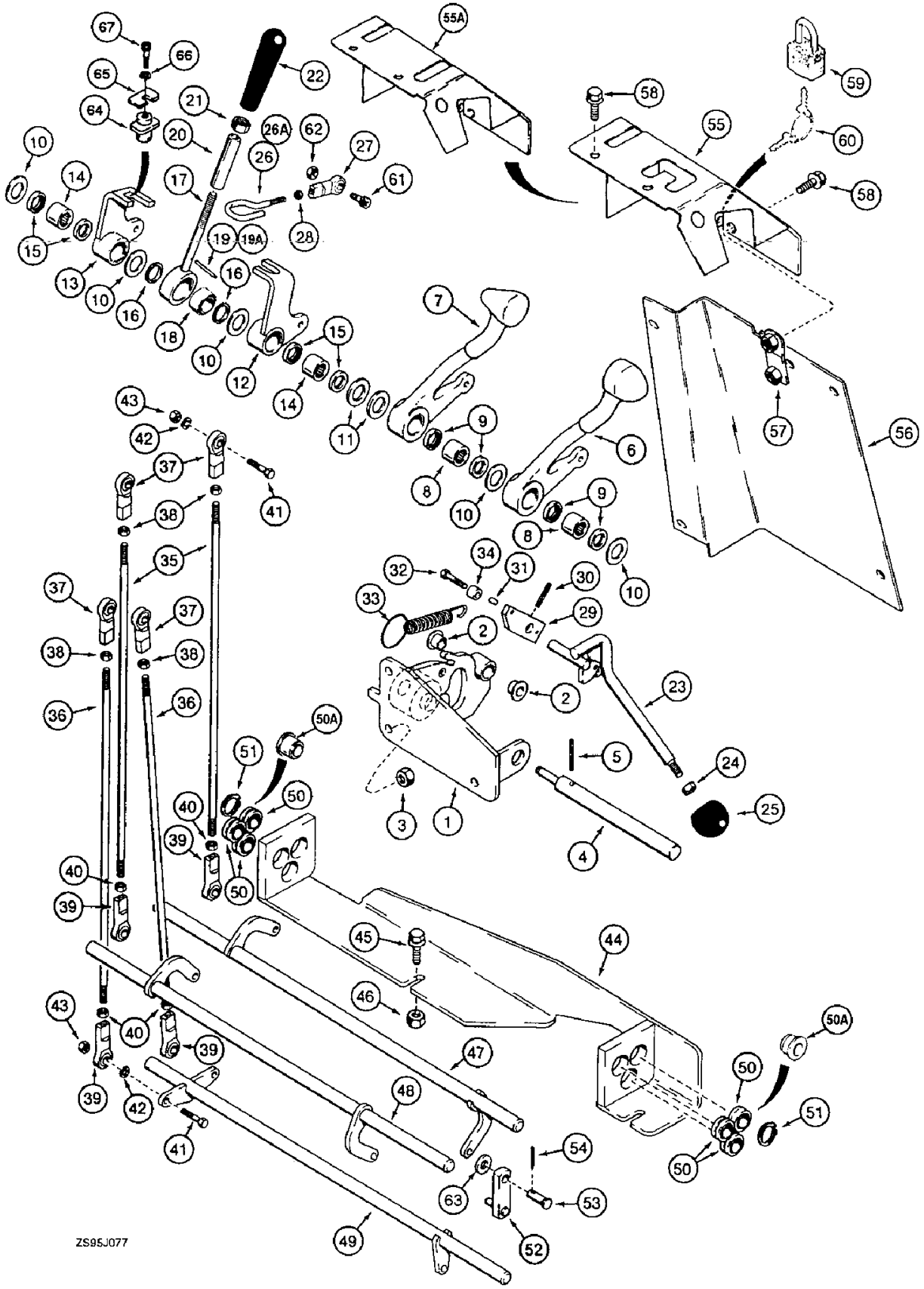
HYDRAULIC OIL FILTERS, R48993 TRANSMISSION OIL FILTER, R50518 EQUIPMENT CIRCUIT OIL FILTER



HYDRAULIC OIL FILTERS, R48993 TRANSMISSION OIL FILTER, R50518 EQUIPMENT CIRCUIT OIL FILTER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
15		D37035		1	FILTER, ELEMENT ELEMENT - filter, transmission suction line
16		238-5218		1	O-RING -218, 70 Duro, 1.234" ID x .139" Thk Element, transmission suction line filter -218, 70 Duro, 1.234" ID x .139" Thk
17		D37036		1	SPRING - element, transmission suction line filter
4		237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk

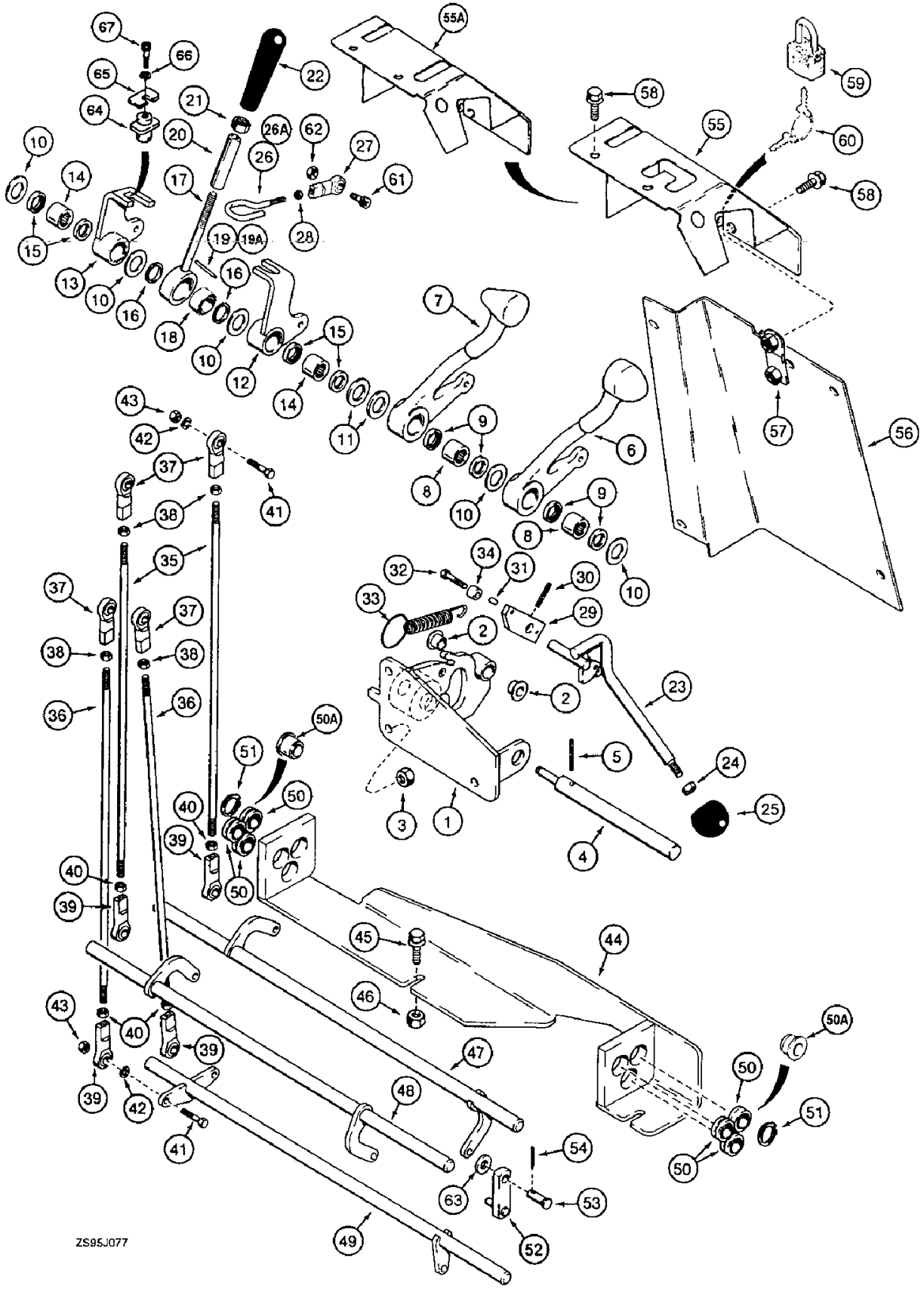
TRANSMISSION CONTROLS



TRANSMISSION CONTROLS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58310		1	BRACKET - mounting, throttle and transmission controls, see figure 3-2 for throttle control components
2		R58311		2	BRONZE BUSHING BUSHING - bronze, at neutral start lever
3		231-1446		3	NUT 3/8"-16, GB NUT - hex, self-locking, 3/8 inch NC
4		R57937		1	SHAFT - pivot, throttle and transmission control lever
5		38-11632		1	LOCK PIN 1/4" x 2", Slotted PIN, LOCK, 1/4" x 2", Slotted
6		R58134		1	LEVER ASSEMBLY - right-hand track speed, includes items 8 and 9
7		R58135		1	LEVER ASSEMBLY - left-hand track speed, includes items 8 and 9
8		377133R91		1	BEARING, NEEDLE 0.75" ID x 1" OD x 0.75" BEARING - roller
9		65457C1		2	SEAL - oil, bearing
10		1960614C1		5	WASHER - wear, at track speed and forward and reverse levers
11		R58209		2	SPACER - nylon, left-hand track speed lever to forward control lever
12		R58206		1	LEVER ASSY. BELLCRANK ASSEMBLY - forward control, includes items 14 and 15
13		R58207		1	LEVER ASSY. BELLCRANK ASSEMBLY - reverse control, includes items 14 and 15
14		377133R91		1	BEARING, NEEDLE 0.75" ID x 1" OD x 0.75" BEARING - roller
15		65457C1		2	SEAL - oil, bearing
16		R57931		2	SPACER - control
		R58305		1	LEVER ASSEMBLY - control, forward-neutral-reverse
17		NSS		1	NOT SERVICED SEPARATELY LEVER - control, forward-neutral-reverse
18		R58306		1	SPHERICAL BEARING 19.05mm ID x 31.75mm OD x 16.66mm BEARING - self-aligning, control lever

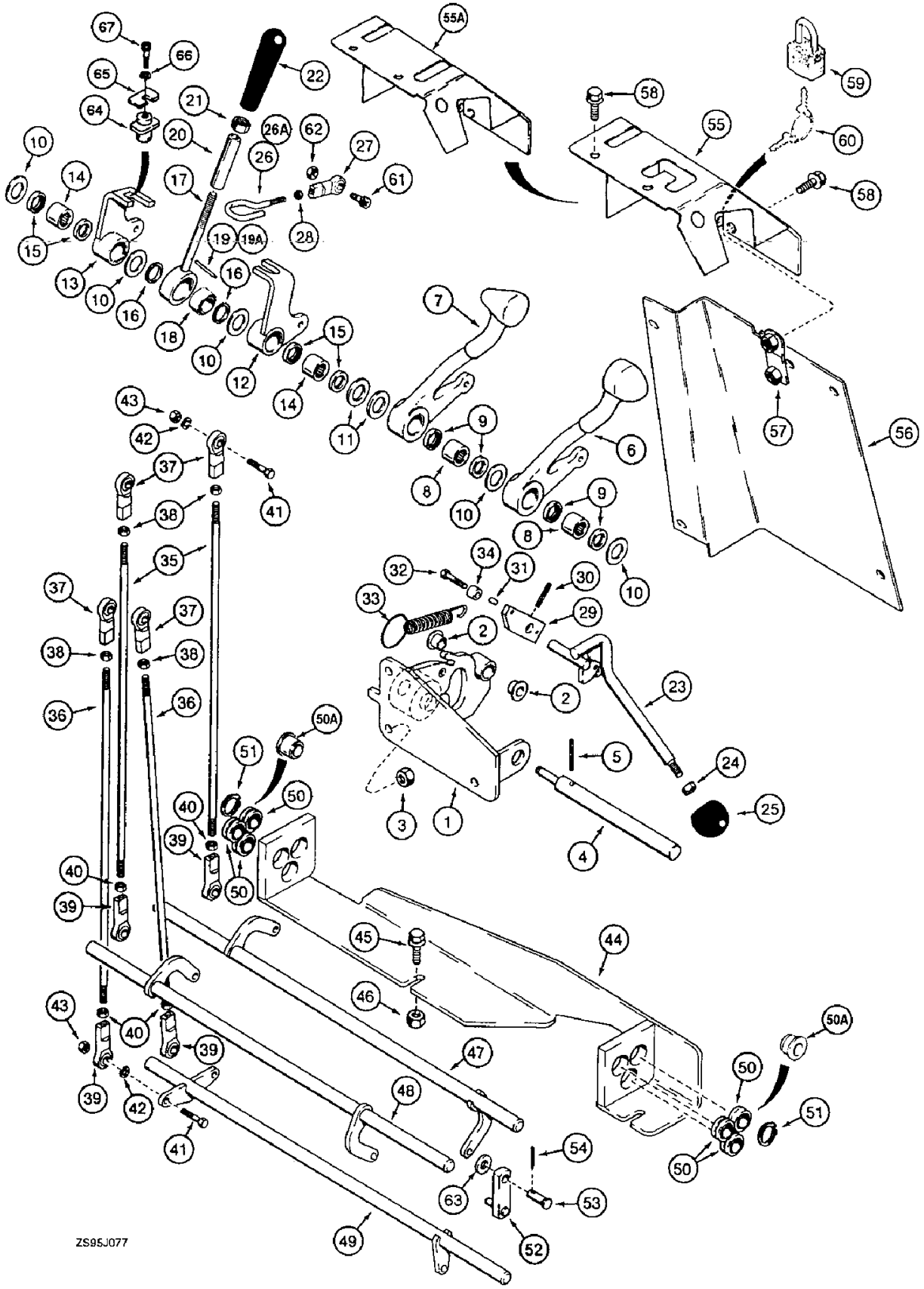
TRANSMISSION CONTROLS



TRANSMISSION CONTROLS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
19		38-1822		1	LOCK PIN 1/8" x 1 3/8", Slotted Pin, 1/8" x 1 3/8", Slotted
19A		38-1814		1	LOCK PIN 1/8" x 7/8", Slotted Pin, , if used 1/8" x 7/8", Slotted
20		R58303		1	ROLLER SPACER - control lever
21		425-146		1	JAM NUT Jam, 3/8"-16, G5 - hex, jam, 3/8 inch NC
22		R58314		1	KNOB HANDLE - control lever
23		R57938		1	LEVER - control, neutral start
24		425-156		1	JAM NUT Jam, 3/8"-24, G5 - hex, jam, 3/8 inch NF, if used
25		70213		1	KNOB - control lever
26		R58266		1	LINK - neutral start lever
26A		R58821		1	LINK - neutral start lever, if used
27		A146456		1	BALL JOINT - ball, adjustable, at link
28		425-154		1	JAM NUT Jam, 1/4"-28, G5 - hex, jam, 1/4 inch NF
29		108505A1		1	ARM - spring mounting, at neutral start lever
30		38-1816		1	LOCK PIN 1/8" x 1", Slotted Pin, 1/8" x 1", Slotted
31		38-31208		1	PIN 3/16" x 1/2", Coiled
32		413-416		1	BOLT Hex, 1/4"-20 x 1", G5 - hex, 1/4 NC x 1 inch
33		101993A1		1	SPRING - return, neutral start lever
34		L126822		1	SPACER - spring mounting
36		{106586A1}		2	ROD - connecting, forward and reverse bellcranks to lower cross shaft
35		101261A1		2	ROD ASSY. ROD - connecting, track speed levers to lower cross shafts
37		R47498		4	END - at control levers, right-hand thread
38		425-155		4	JAM NUT Jam, 5/16"-24, G5 - hex, jam, 5/16 inch NF, RH thread
39		R58783		4	END - at lower cross shaft, left-hand thread
40		129-216		4	JAM NUT Jam, 5/16"-18, G5, LH thread Jam, 5/16"-18, G5, LH

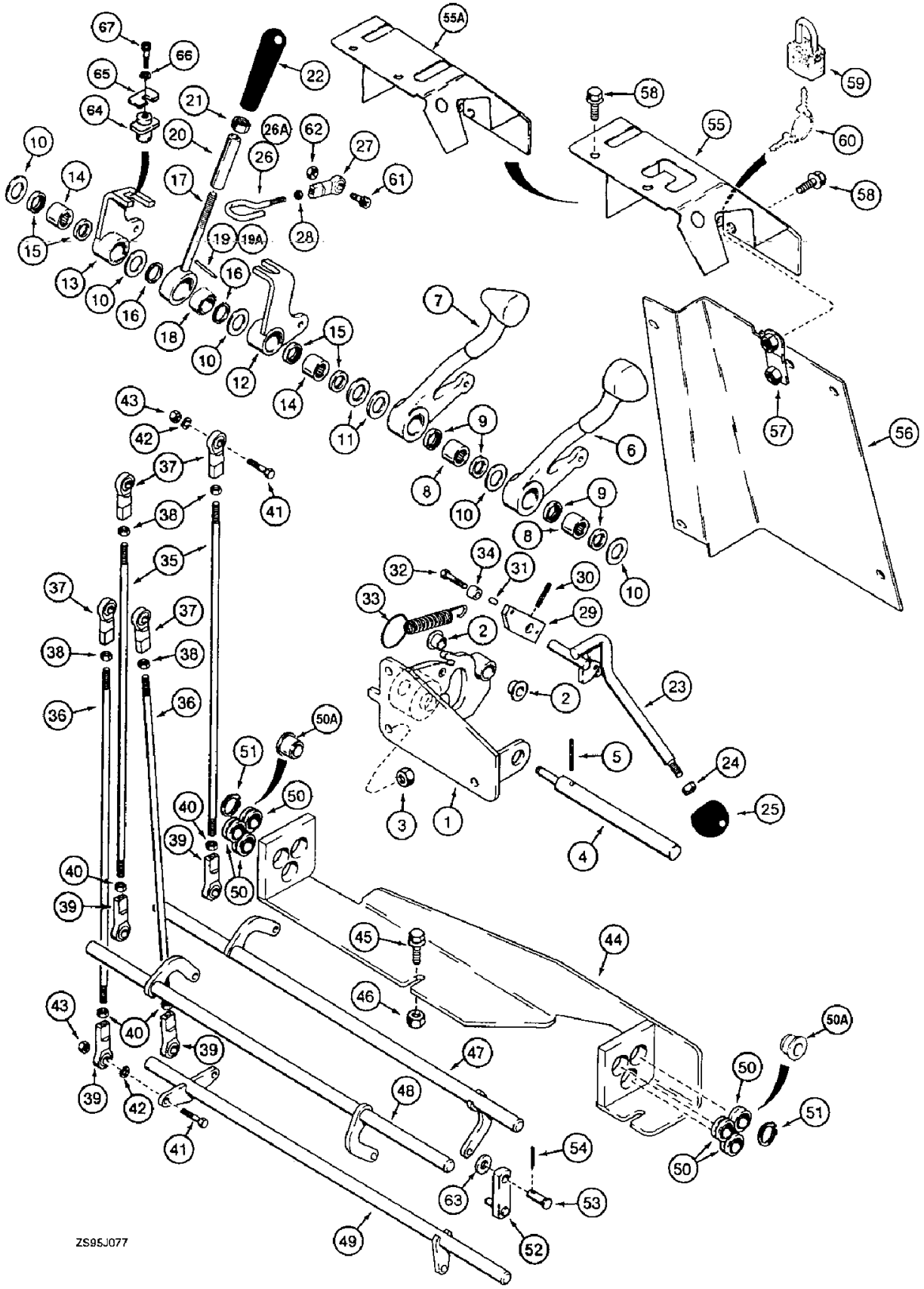
TRANSMISSION CONTROLS



TRANSMISSION CONTROLS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
41		413-520		8	BOLT Hex, 5/16"-18 x 1 1/4", G5 - hex, 5/16 NC x 1-1/4 inch
42		492-11031		8	LOCK WASHER 5/16" WASHER, LOCK, 5/16"
43		231-1445		8	NUT 5/16"-18, GB NUT - hex, self-locking, 5/16 inch NC, lock
44		106641A1		1	BRACKET - mounting, lower control cross shafts
45		160-103		2	BOLT Hex Flg, 3/8"-16 x 1 1/4", G8, Full Thd
46		231-1446		2	NUT 3/8"-16, GB NUT - hex, self-locking, 3/8 inch NC
47		R57883		1	SHAFT - cross, lower control, right-hand track speed
48		R57884		1	SHAFT - cross, lower control, left-hand track speed
49		106639A1		1	SHAFT - cross, lower control, forward-neutral-reverse
50		R58197		6	BUSHING BEARING - self-aligning, steel, cross shafts, no longer used, service with 130756A1
50A		130756A1		6	BUSHING BEARING - self-aligning, plastic, cross shafts
51		100-1462		6	SNAP RING #62, Ext Ring, Snap, , Brg #62, Ext
52		NSS		1	NOT SERVICED SEPARATELY LINK - connecting, cross
		R58660		3	LINK ASSEMBLY - connecting
53		427-5094		2	CLEVIS PIN 5/16" x .940", HDN PIN - clevis, 5/16 x 15/16 inch, hardened
54		32-612		6	COTTER PIN 3/32" x 3/4" PIN, SPLIT (COTTER), 3/32" x 3/4"
55		106610A1		1	COVER - console, top, U pattern
55A		R58816		1	COVER - console, top, in-line pattern, if used
51		100-1462		6	SNAP RING #62, Ext Ring, Snap, , Brg #62, Ext
		R58660		3	LINK ASSEMBLY - connecting
52		NSS		1	NOT SERVICED SEPARATELY LINK - connecting, cross

TRANSMISSION CONTROLS

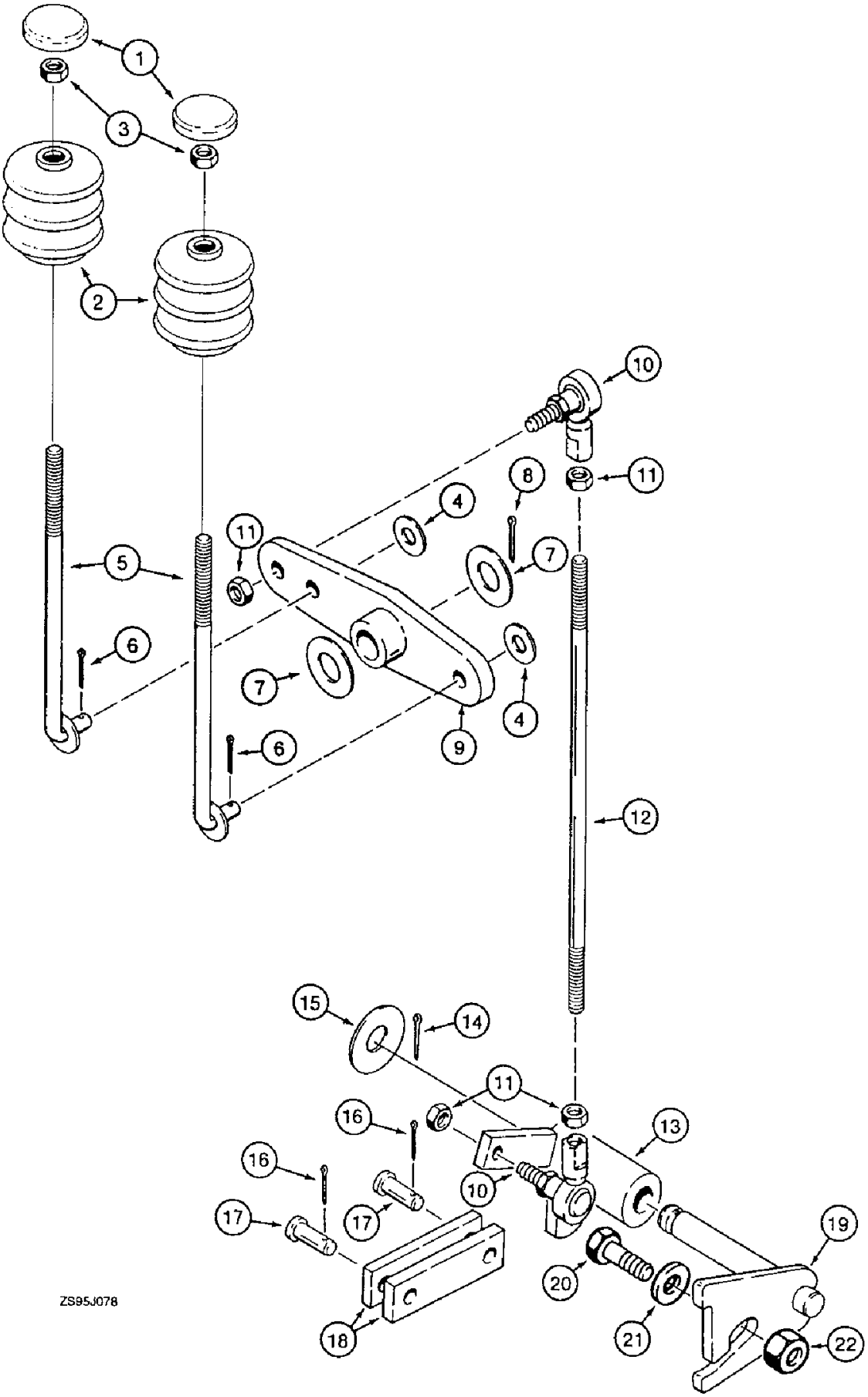


TRANSMISSION CONTROLS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
53		427-5094		2	CLEVIS PIN 5/16" x .940", HDN PIN - clevis, 5/16 x 15/16 inch, hardened
54		32-612		6	COTTER PIN 3/32" x 3/4" PIN, SPLIT (COTTER), 3/32" x 3/4"
55	1	106610A1		1	COVER - console, top, U pattern
55A	1	R58816		1	COVER - console, top, in-line pattern, if used
56	1	R58656		1	COVER - console, front
57		R58703		1	PLATE BRACKET - support, top console cover
58		160-101		8	BOLT Hex Flg, 3/8"-16 x 3/4", G8, Full Thd - hex serrated flange, 3/8 NC x 3/4 inch
59		D93753		1	PADLOCK - includes keys, to console cover, if used
60		R29555		2	KEY - for Master padlock only
60		D93751		2	SET OF 2 KEYS KEY - for Yale padlock only
61		461-32512		1	HEX SOC SCREW Hex Soc Hd, 1/4"-20 x 3/4" BOLT - hex socket, 1/4 NC x 3/4 inch
62		131-204		1	NUT 1/4"-20 NUT - heavy hex, self-locking, 1/4 inch NC
63		495-11041		6	WASHER 3/8", SAE (Flat, 13/32 x 13/16 x 1/16") 3/8", SAE
64		R58819		1	SHAFT LEVER - mounting, if used
65		R58820		1	LARGE PLATE PLATE - shaft mounting, if used
66		492-11025		1	LOCK WASHER 1/4" WASHER, LOCK, , If used 1/4"
67		461-7258		6	HEX SOC SCREW Hex Soc But Hd, 1/4"-20 x 1/2" SCREW - button, 1/4 NC x 1/2 inch, if used

(1) See Figure 3-04, item 20 for lower transmission controls cover

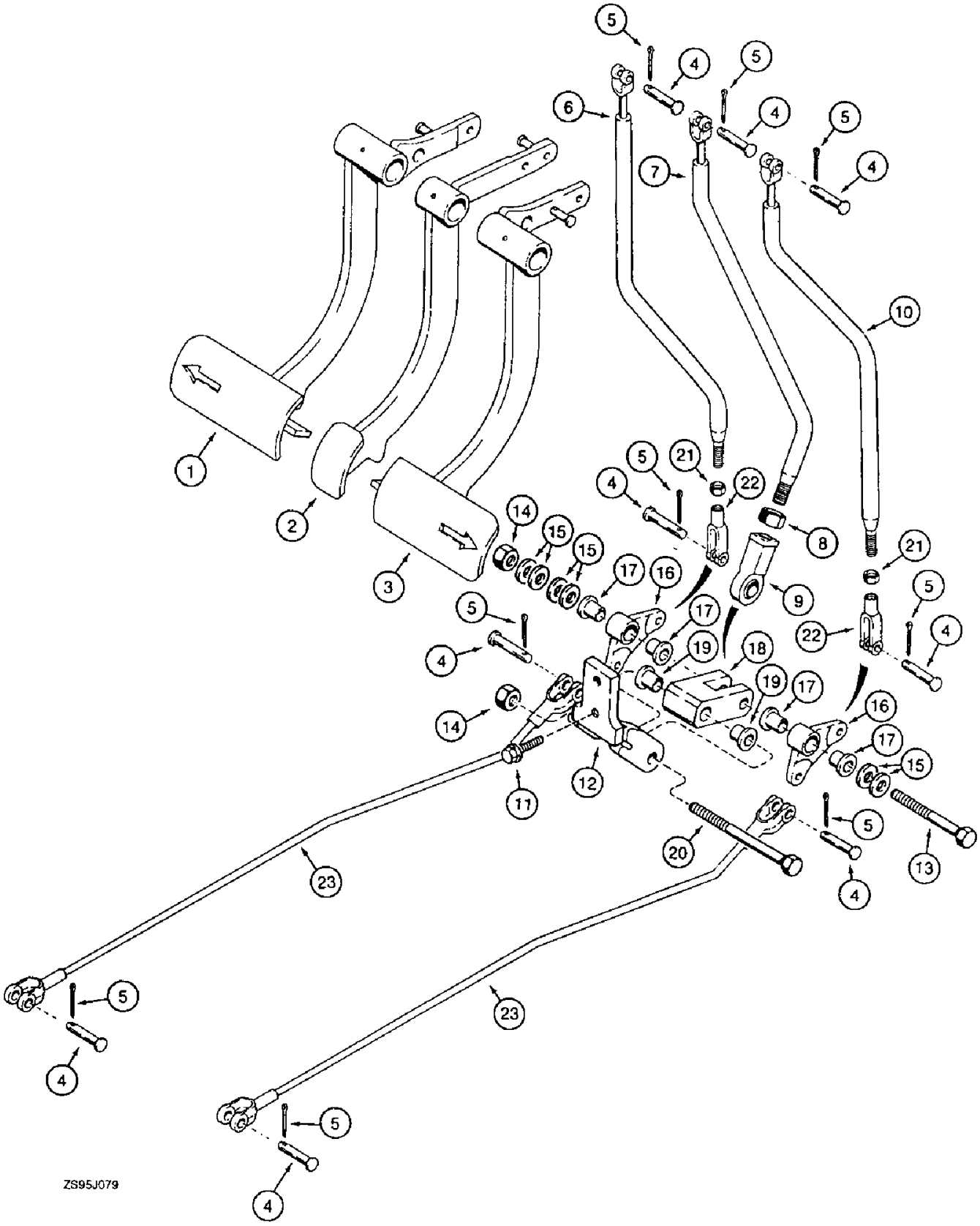
TRANSMISSION RANGE SHIFT CONTROL



TRANSMISSION RANGE SHIFT CONTROL

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R57963		2	PEDAL - range shift control
2		D141049		2	BOOT - pedal
3		425-106		2	NUT 3/8"-16, G5
4		495-21044		2	WASHER 3/8" (flat, 7/16 x 1 x 5/64 inch) 3/8"
5		R58478		2	ROD -
6		32-610		2	COTTER PIN 3/32" x 5/8" PIN, SPLIT (COTTER), 3/32" x 5/8"
7		895-11020		2	WASHER M20 x 37 x 3 - flat, 22 x 37 x 3 mm
8		32-1220		1	COTTER PIN 3/16" x 1 1/4" PIN, SPLIT (COTTER), 3/16" x 1 1/4"
9		R58623		1	LEVER BELLCRANK - range shift control
10		R47940		2	BALL JOINT JOINT - ball, 3/8 inch NF, control lever
11		425-116		4	NUT 3/8"-24, G5 - hex, 3/8 inch NF
12		S224930		1	STUD ROD - to range shift lever
13		R58567		1	LEVER - range shift control
14		32-1016		1	COTTER PIN PIN - cotter, 5/32 x 1 inch
15		495-11066		1	WASHER 5/8", SAE - flat, 21/32 x 1-5/16 x 3/32 inch
16		32-612		2	COTTER PIN 3/32" x 3/4" PIN, SPLIT (COTTER), 3/32" x 3/4"
17		427-6106		2	CLEVIS PIN 3/8" x 1 1/16" PIN, CLEVIS, , Hardened 3/8" x 1 1/16"
18		R53701		2	LINK - range control lever
19		100729A1		1	SHAFT - range shift control
20		413-824		1	BOLT Hex, 1/2"-13 x 1 1/2", G5, Full Thd
21		496-21053		1	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened
22		231-1448		1	NUT 1/2"-13, GB - hex, self-locking, 1/2 inch NC

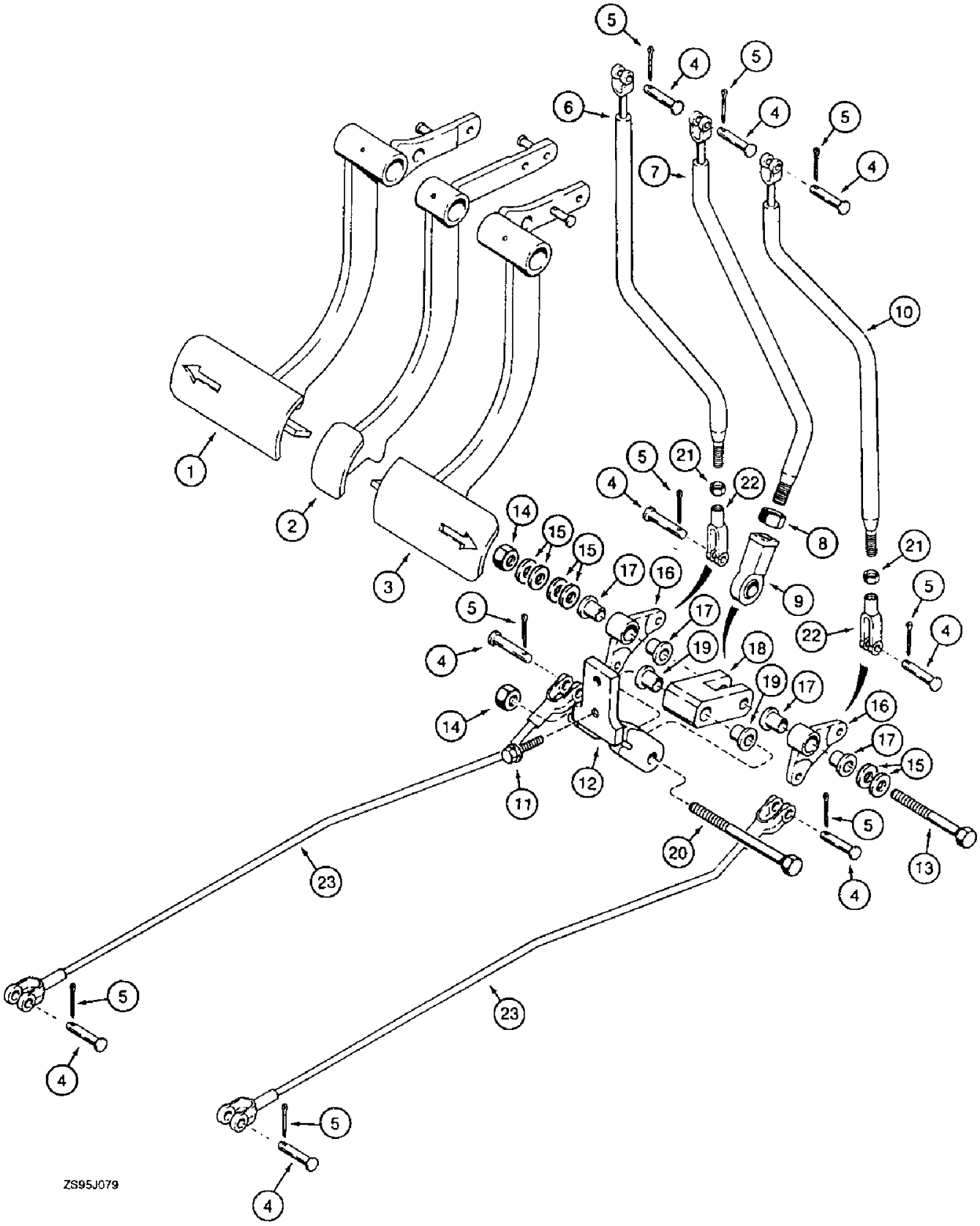
TRANSMISSION CLUTCH CUTOUT LINKAGE



TRANSMISSION CLUTCH CUTOUT LINKAGE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58466		1	PEDAL ASSEMBLY - brake, left-hand, see figure 7-2 for components and related parts
2		R58628		1	PEDAL ASSEMBLY - brake, center, see figure 7-2 for components and related parts
3		R58465		1	PEDAL ASSEMBLY - brake, right-hand, see figure 7-2 for components and related parts
4		427-5094		9	CLEVIS PIN 5/16" x .940", HDN PIN - clevis, 5/16 x 15/16 inch, hardened
5		32-612		9	COTTER PIN 3/32" x 3/4" PIN, SPLIT (COTTER), 3/32" x 3/4"
6		R58671		1	ROD - center pedal to clutch cutout block
		R58704		1	ROD ASSEMBLY - center pedal
7		NSS		1	NOT SERVICED SEPARATELY ROD - center pedal to clutch cutout block
8		425-118		1	NUT 1/2"-20, G5 - hex, 1/2 inch NF
9		L115782		1	BALL JOINT JOINT - ball, female
10		R58669		1	ROD - right-hand
11		160-102		2	BOLT Hex Flg, 3/8"-16 x 1", G8, Full Thd
12		R58701		1	BRACKET - block mounting
13		426-864		1	BOLT Hex, 1/2"-13 x 4", G8 - hex, 1/2 NC x 4 inch, grade 8
14		231-1448		2	NUT 1/2"-13, GB - hex, self-locking, 1/2 inch NC
15		495-11053		6	WASHER 1/2", SAE (17/32" x 1-1/16" x 3/16") 1/2", SAE
		R58374		2	CRANK LEVER BELLCRANK ASSEMBLY - clutch cutout
16		NSS		1	NOT SERVICED SEPARATELY BELLCRANK - clutch cutout
17		R58311		2	BRONZE BUSHING BUSHING - bronze
		R58375		1	BLOCK ASSEMBLY - connection, clutch cutout
18		NSS		1	NOT SERVICED SEPARATELY BLOCK - connection, clutch cutout

TRANSMISSION CLUTCH CUTOUT LINKAGE



TRANSMISSION CLUTCH CUTOUT LINKAGE

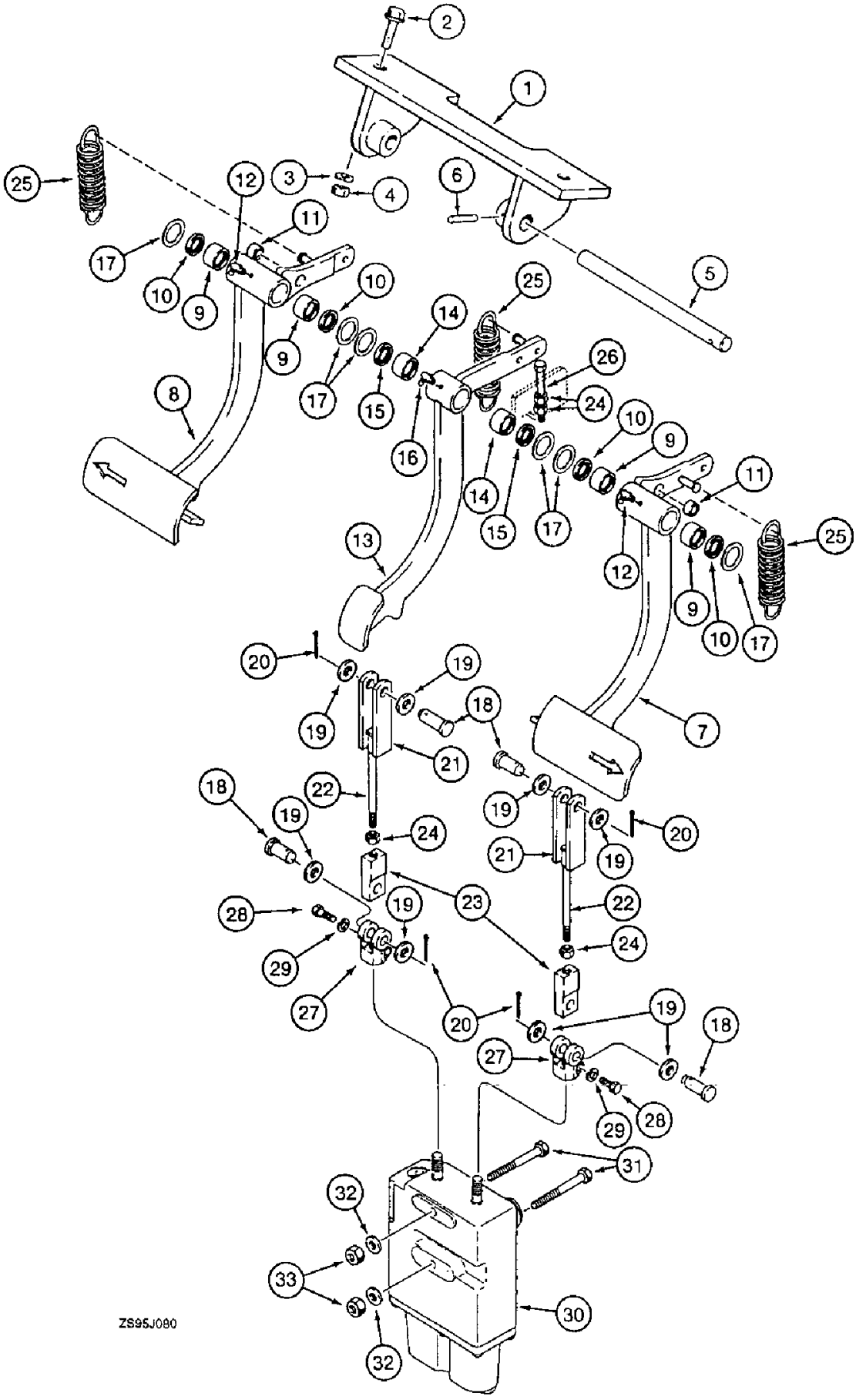
REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
19		R58311		2	BRONZE BUSHING BUSHING - bronze
20		426-888		1	BOLT Hex, 1/2"-13 x 5 1/2", G8 - hex, 1/2 NC x 5-1/2 inch, grade 8
21		329-115		2	NUT 5/16"-24, G8
22		213-125		2	ADJUSTABLE CLEVIS 5/16"-24 CLEVIS - adjustable, 5/16 inch NF
23		R58644		2	ROD -

SECTION INDEX

Brakes

7-02	BRAKE PEDALS AND LINKAGE
7-04	POWER BRAKE HYDRAULIC LINES, VALVE TO TRANSMISSION
7-06	TRANSMISSION BRAKES
7-08	1272218C1 BRAKE VALVE

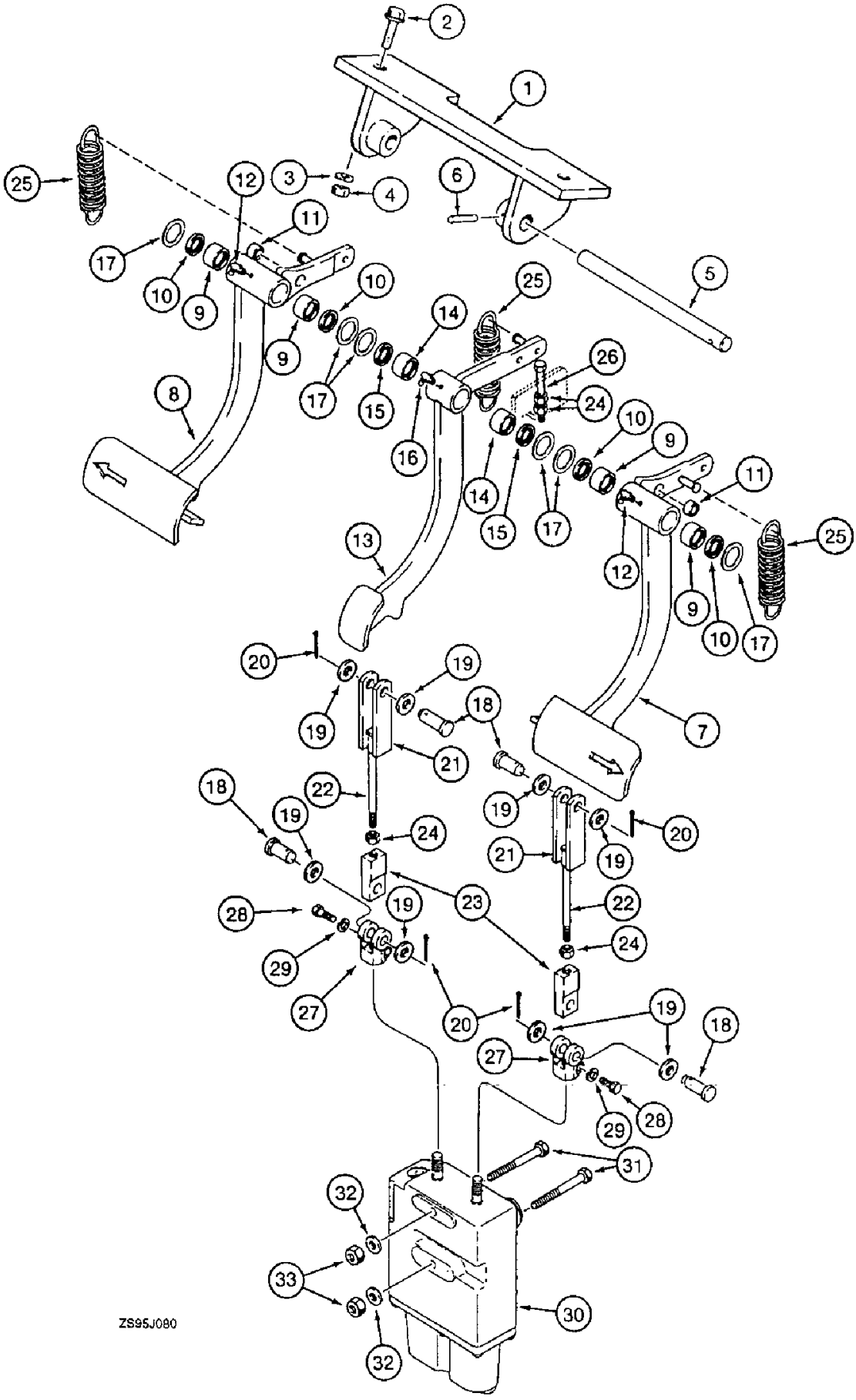
BRAKE PEDALS AND LINKAGE



BRAKE PEDALS AND LINKAGE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58458		1	BRACKET - mounting, brake pedals
2		409-7820		2	BOLT Hex Flg, 1/2"-13 x 1 1/4", Serr
3		80679		2	LOCK WASHER 1/2" WASHER, LOCK, 1/2"
4		425-108		2	NUT 1/2"-13, G5 NUT, , Hex 1/2"-13, G5
5		R58225		1	SHAFT - mounting, brake pedals
6		38-11622		1	LOCK PIN 1/4" x 1 3/8", Slotted Pin, 1/4" x 1 3/8", Slotted
7		R58465		1	PEDAL ASSEMBLY - brake, right-hand, includes items 9 - 12
8		R58466		1	PEDAL ASSEMBLY - brake, left-hand, includes items 9 - 12
9		L31166		2	BEARING - roller, lever
10		65457C1		2	SEAL - oil, bearing
11		L13071		1	BUSHING - pedal linkage
12		219-57		1	LUBE NIPPLE 90º, 1/4" NPT x .75" lg FITTING - grease, 90 degree, 1/4-28 taper x 3/4 inch, 90 degree
13		R58628		1	PEDAL ASSEMBLY - brake, center
14		L31166		2	BEARING - roller, pedal
15		65457C1		2	SEAL - oil, bearing
16		219-57		1	LUBE NIPPLE 90º, 1/4" NPT x .75" lg FITTING - grease, 90 degree, 1/4-28 taper x 3/4 inch, 90 degree
17		D35268		UAR	SHIM 1/32" Thk (25/32" ID x 1-1/4" OD) 1/32" Thk
18		427-8168		4	CLEVIS PIN 1/2" x 1 11/16"' PIN - clevis, 1/2 x 1-11/16 inch, hardened
19		495-11053		8	WASHER 1/2", SAE (17/32" x 1-1/16" x 3/32") 1/2", SAE
20		432-816		4	COTTER PIN 1/8" x 1" 1/8" x 1"
21		R58362		2	FORK YOKE - pedal, to valve, at pedal
22		17-696		2	BOLT Sq Hd, 3/8"-16 x 6", G2 - square head, 3/8 NC x 6 inch, grade 2, yoke to valve
23		R58461		2	LINK - adjustable, brake pedal bolt
24		425-146		4	JAM NUT Jam, 3/8"-16, G5 - hex, jam, 3/8 inch NC

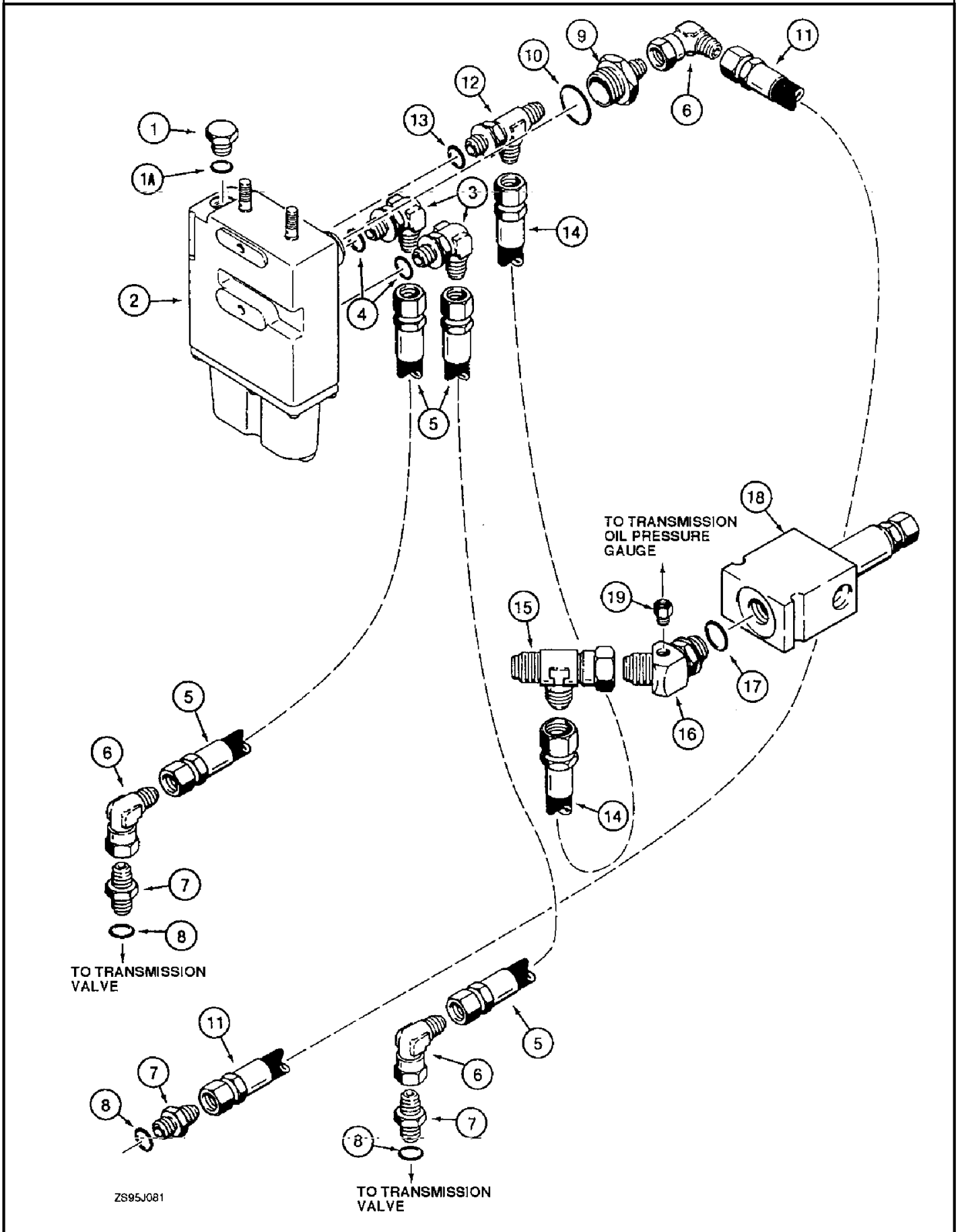
BRAKE PEDALS AND LINKAGE



BRAKE PEDALS AND LINKAGE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
25		R36912		3	SPRING - pedal return
26		113-232		1	BOLT Hex, 3/8"-16 x 2", G5, Full Thd Pedal adjustment Hex, 3/8"-16 x 2", G5, Full Thd
27		384083R2		2	CLEVIS YOKE - pedal to valve, at valve
28		413-518		2	BOLT Hex, 5/16"-18 x 1 1/8", G5, Full Thd - hex, 5/16 NC x 1-1/8 inch, yoke retaining
29		492-11031		2	LOCK WASHER 5/16" WASHER, LOCK, 5/16"
30		1272218C1		1	VALVE ASSEMBLY - brake, parts list figure 7-8
31		413-660		2	BOLT Hex, 3/8"-16 x 3 3/4", G5 - hex, 3/8 NC x 3-3/4 inch
32		496-41041		2	WASHER 13/32" x 1 1/8" x .134" - flat, 13/32 x 1-1/8 x 9/64 inch, hardened
33		231-1406		2	LOCK NUT 3/8"-16, GB NUT - hex, self-locking, 3/8 inch NC

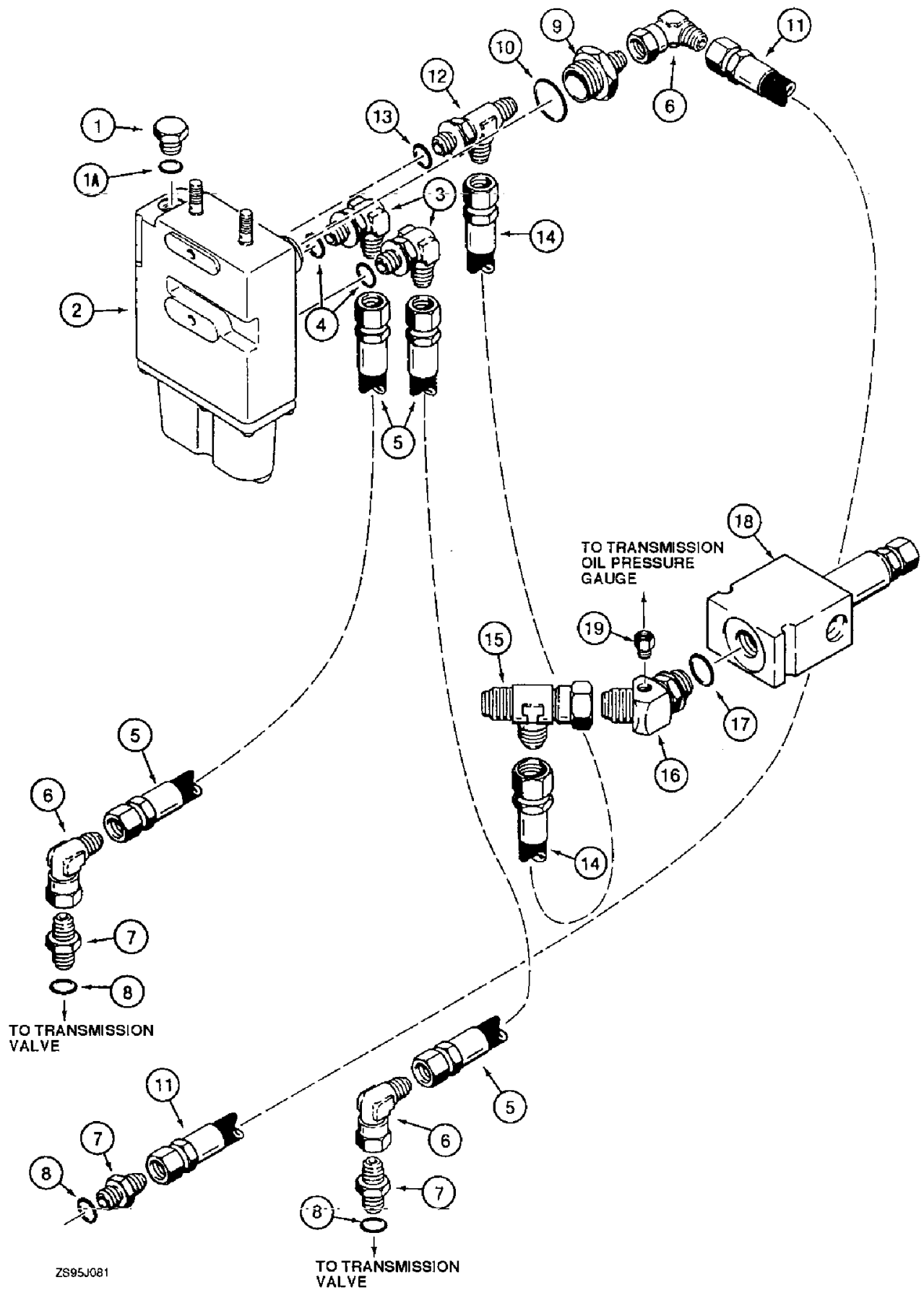
POWER BRAKE HYDRAULIC LINES, VALVE TO TRANSMISSION



POWER BRAKE HYDRAULIC LINES, VALVE TO TRANSMISSION

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		76349		1	PLUG Hex Hd, 9/16"-18 ORB
2		1272218C1		1	VALVE ASSEMBLY - power brake, parts list figure 7-8, see figure 7-2 for mounting hardware and linkage
3		218-5105		2	ELBOW 90º, 9/16"-18, 37º x 9/16"-18, O-Ring - 90 degree, 9/16-18 inch flare x adj O-ring boss
5		R58723		2	HOSE - 45-7/8 inch (1163 mm) long, valve to transmission without modulator, see figure 6-26 for transmission assembly
5A		R56863		2	HOSE - 32 inch (813 mm) long, valve to transmission with modulator, see figure 6-28 for transmission assembly
6		218-980		3	ELBOW 90º, 9/16"-18, 37º x 9/16"-18, 37º Fem Sw - 90 degree, 9/16-18 inch flare x swivel
7		218-5057		3	HYD CONNECTOR 9/16"-18, 37º x 9/16"-18, O-Ring ADAPTER - straight, 9/16-18 inch flare x O-ring boss
9		218-5044		1	HYD CONNECTOR 9/16"-18, 37º x 1 1/16"-12, O-Ring ADAPTER - straight, 9/16-18 flare x 1-1/16-12 inch O-ring boss
10		237-6012		1	O-RING 0.924" x 0.116" 12-1, 90 Duro, .924 ID x .116" Thk
11		R58725		1	HOSE - 57-1/8 inch (1451 mm) long, valve to transmission without modulator, see figure 6-8 for transmission assembly
11A		1541268C1		1	HOSE - 50 inch (1270 mm) long, valve to transmission with modulator, see figure 6-8 for transmission assembly
12		218-5243		1	TEE 9/16"-18, 37º x 9/16"-18, O-Ring Run - 9/16-18 inch flare branch x flare x adj O-ring boss

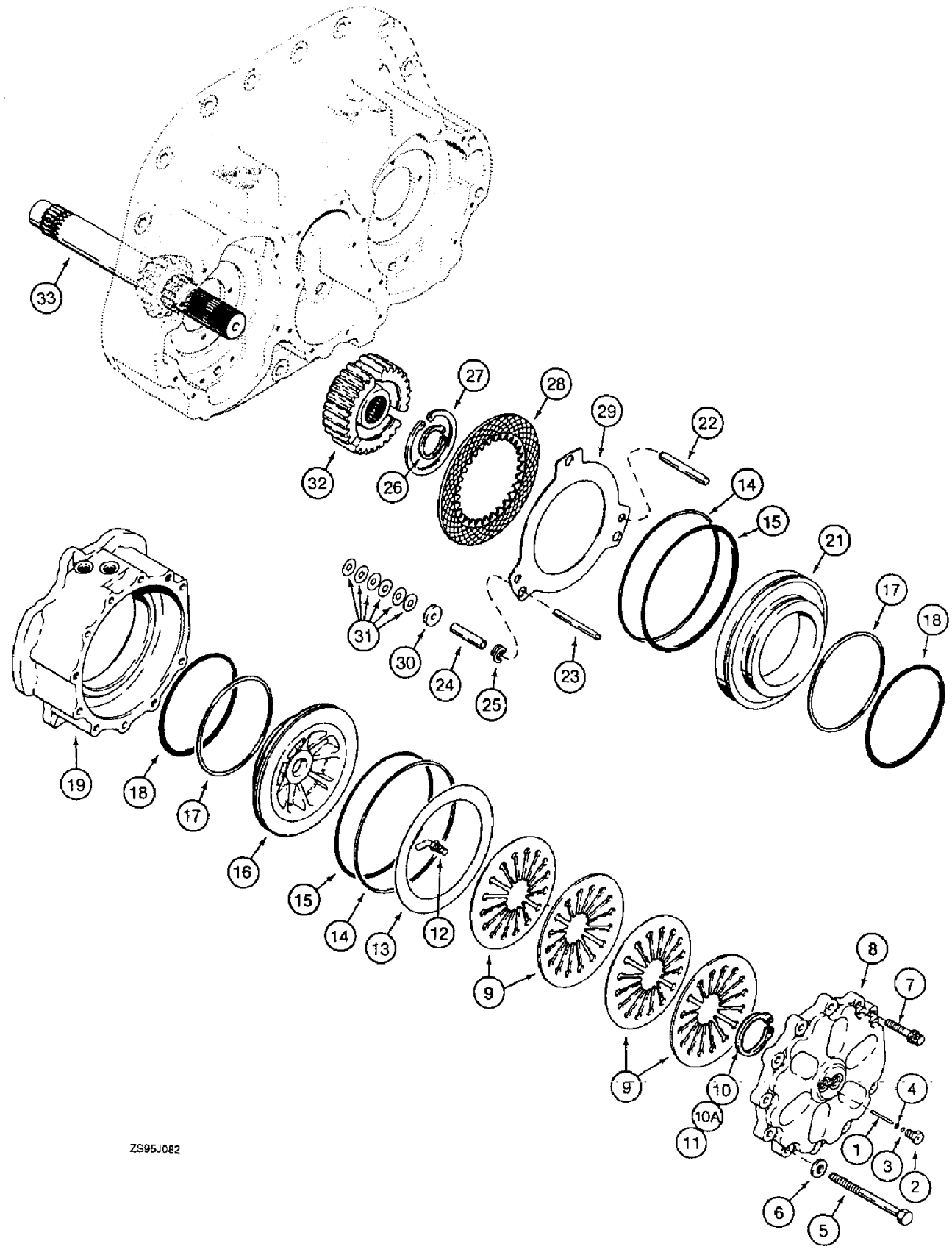
POWER BRAKE HYDRAULIC LINES, VALVE TO TRANSMISSION



POWER BRAKE HYDRAULIC LINES, VALVE TO TRANSMISSION

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
14		R58726		1	HOSE - 41 inch (1041 mm) long, brake valve to relief valve
15		218-5219		1	TEE 37º, 7/8"-14 x 3/4"-16, Fem Sw Run x 3/4"-16 Br - 3/4-16 flare branch x 1-1/16-12 inch flare x swivel, thread
16		R57596		1	FITTING ELBOW - 45 degree, special, special, see figure 4-12 for transmission oil pressure gauge
17		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
18		R57582		1	VALVE ASSEMBLY - relief, see figure 6-38 for related parts
19		221-87		1	REDUCER Hex, 1/2" x 1/8" NPT - pipe 1/2 male x 1/8 inch female
1A		237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk
4		237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk
8		237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk
13		237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk

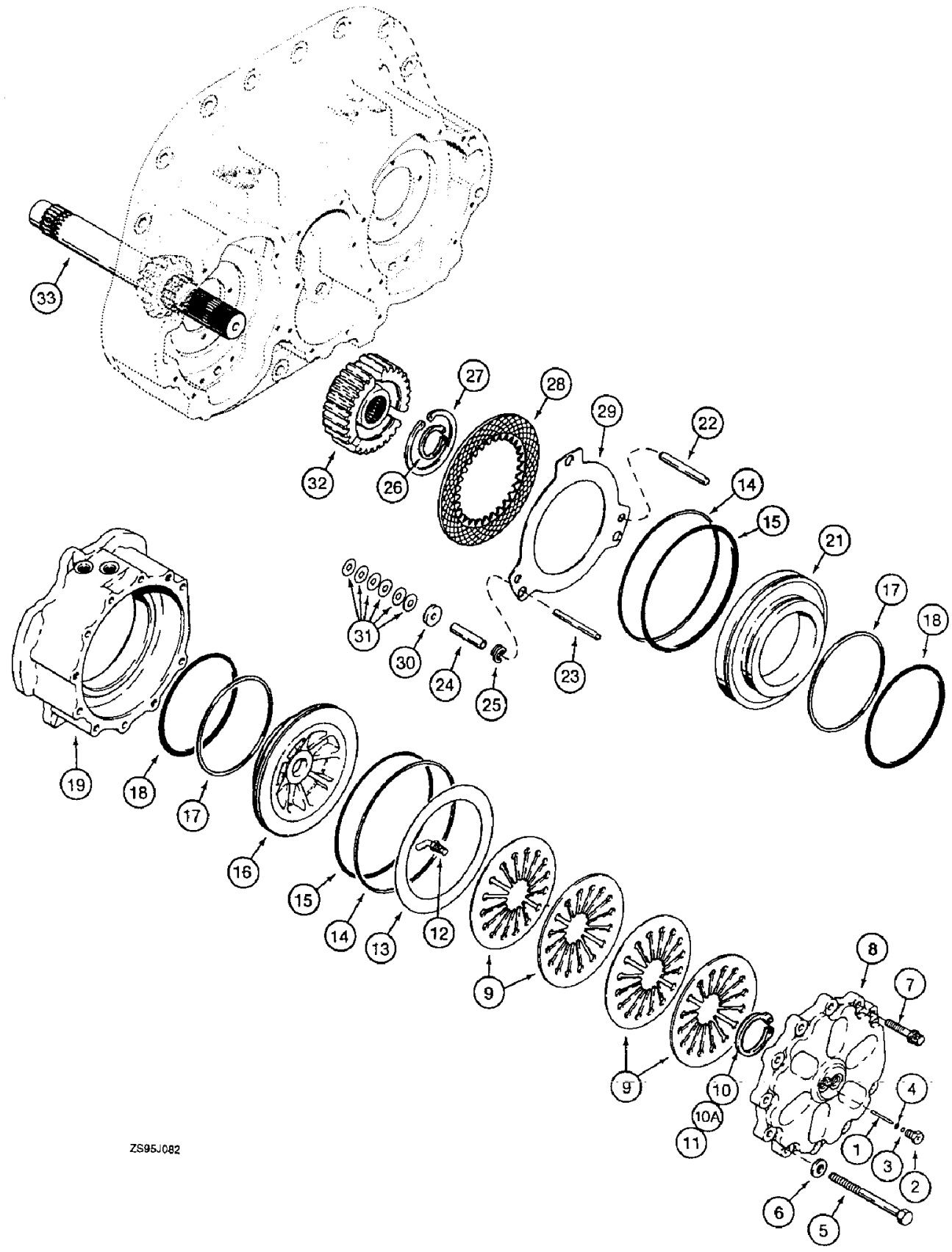
TRANSMISSION BRAKES



TRANSMISSION BRAKES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		REF		1	INSTRUCTION TRANSMISSION ASSEMBLY - see figure 6-8 for correct assembly
1		1997011C4		2	PIN GAUGE - sight, brake wear
2		1997050C3		2	PLUG - special, sight gauge
3		238-5006		2	O-RING 0.114" ID x 0.254" OD x 0.07" -006, 70 Duro, .114" ID x .070" Thk
4		100-2531		2	SNAP RING 0.312", Int, #31 Ring, Snap, 0.312", Int, #31
5		107-9684		16	LOCK BOLT Locking, 3/8"-16 x 5 1/4", G8 BOLT, Locking, 3/8"-16 x 5 1/4 inch", G8
6		396-21041		16	WASHER 13/32" x 13/16" x .09", HDN - flat, 13/32 x 13/16 x 3/32 inch, hardened
7		180-617		6	12 PT SCREW 12 Pt Flg, 3/8"-16 x 1 3/4", G8 BOLT - 12 point flange, self-locking, 3/8 NC x 1-3/4 inch, grade 8
8		1348963C3		2	COVER - brake, also order ref 11 snap ring
9		1348986C1		8	SPRING - parking brake
10		800-1148		2	SNAP RING M48, Ext RING - snap, .069 inch (1.75 mm) thick, if used
10A		800-5148		2	SNAP RING M48, Ext, Hvy RING - snap, .098 inch (2.50 mm) thick, if used
11		100-16193		2	SNAP RING #193, Ext Ring, Snap, , if used #193, Ext
12		1997079C1		2	TUBE 7.94 mm OD - brake
13		1348999C1		2	BELLEVILLE SPRING - spring, parking brake
14		1348992C1		4	SEAL - brake piston, outer
15		238-7167		4	O-RING -167, Cl 7, 6.987" ID x .103" Thk
16		1348971C2		2	PISTON - parking brake
17		1348903C1		4	SEAL - brake piston, inner
18		238-5159		4	O-RING -159, 70 Duro, 4.987" ID x .103" Thk

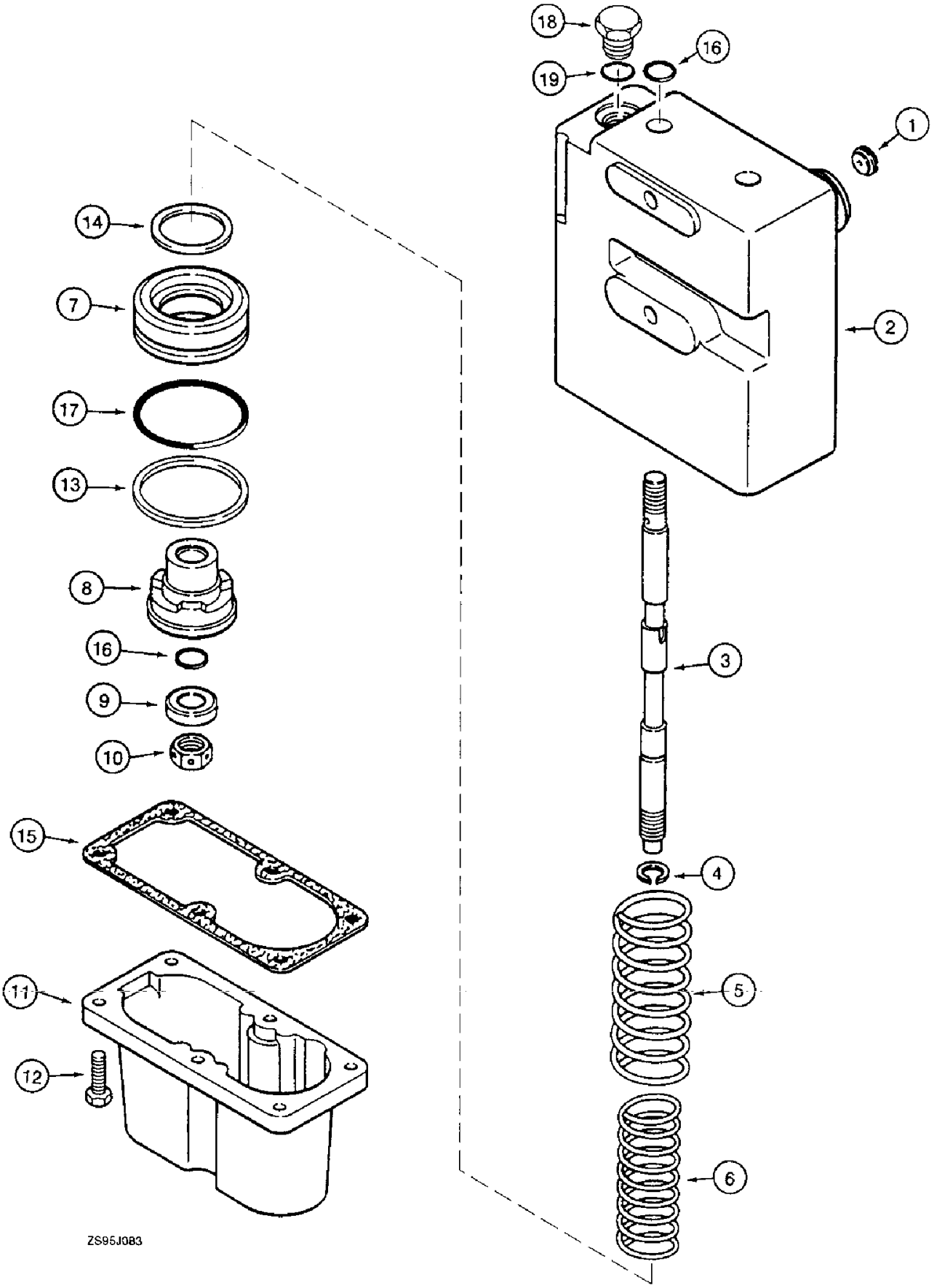
TRANSMISSION BRAKES



TRANSMISSION BRAKES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
19		1997049C1		1	HOUSING - brake, right hand
20		1348960C2		1	HOUSING - brake, left hand, not shown
21		1348972C2		2	PISTON - brake
22		37-1852		4	DOWEL 3/4" x 3 1/4" PIN - dowel, 1/2 x 3-1/4 inch, hardened
23		37-1652		6	DOWEL 3/8" x 3 1/4" PIN - dowel, 3/8 x 3-1/4 inch, hardened
24		1348983C1		6	TUBE 9.83 mm ID, 12.7 mm OD, 50 mm Length - self adjuster
25		100-1450		12	SNAP RING #50, Ext Ring, Snap, , Self adjuster #50, Ext
26		800-1140		2	SNAP RING M40, Ext Brake hub M40, Ext
27		800-2188		2	SNAP RING M88, Int RING - snap, brake hub, internal
28		G102354		8	PLATE DISC - friction, brake
29		1348965C3		10	LARGE PLATE PLATE - separator, brake
30		25553R1		6	WASHER 13/32" x 1 1/8" x .134", HDN - flat, 13/32 x 1-1/8 x 9/64 inch, hardened
31		1348985C1		36	SPRING - piston return
32		1348981C1		2	HUB - brake
33		REF		2	INSTRUCTION SHAFT - bevel pinion, see figure 6-8, item 9

1272218C1 BRAKE VALVE



1272218C1 BRAKE VALVE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		1272218C1		1	VALVE ASSEMBLY - brake
1		140720C1		1	PLATE - orifice
2		NSS		1	NOT SERVICED SEPARATELY BODY - valve
3		NSS		2	NOT SERVICED SEPARATELY SPOOL - valve
4		A27020		2	RING - retaining
5		1263124C1		2	SPRING - piston, large, outer
6		1263125C1		2	SPRING - return, inner
7		NSS		2	NOT SERVICED SEPARATELY PISTON - large
8		NSS		2	NOT SERVICED SEPARATELY PISTON - small
9		69158C1		2	RETAINER - piston
10		9411648		2	LOCK NUT 1/2"-20, GC NUT - hex, self-locking, 1/2 inch NF, special
11		384495R1		1	CAP - body
12		113-9		6	BOLT Hex, 1/4"-20 x 7/8", G5, Full Thd - hex, 1/4 NC x 7/8 inch
13	1	NSS		2	NOT SERVICED SEPARATELY RING - backup, piston seal, teflon
14	1	NSS		2	NOT SERVICED SEPARATELY WASHER - spring seat
15	1	384503R2		1	GASKET - body
16	1	NSS		4	NOT SERVICED SEPARATELY O-RING - spool
17	1	NSS		2	NOT SERVICED SEPARATELY O-RING - piston
18	1	76349		1	PLUG Hex Hd, 9/16"-18 ORB
		71487C92		1	GASKET KIT KIT - seal, Includes: Ref. 13-19
19	1	237-6006		1	O-RING 0.114" ID x 0.254" OD x 0.07" 6-1, 90 Duro, .468" ID x .078" Thk

(1) Part of Seal Kit P/N 71487C92

SECTION INDEX

Hydraulics

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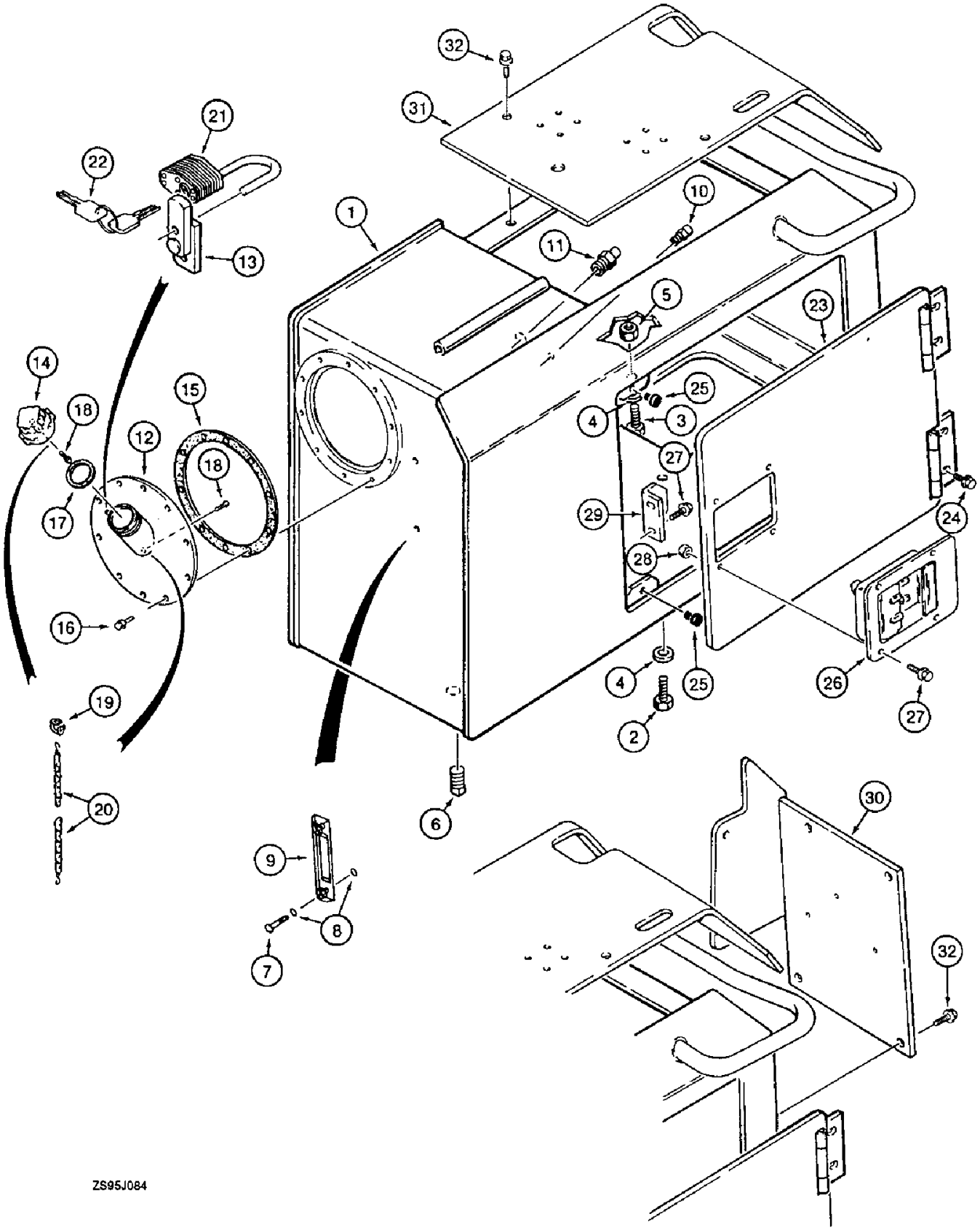
HYDRAULIC RESERVOIR FRAME AND COVERS



HYDRAULIC RESERVOIR FRAME AND COVERS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58152		1	TANK FRAME - hydraulic reservoir and equipment control valve
2		413-820		2	BOLT Hex, 1/2"-13 x 1 1/4", G5, Full Thd - hex, 1/2 NC x 1-1/4 inch
3		413-828		3	BOLT Hex, 1/2"-13 x 1 3/4", G5
4		496-21053		5	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened
5		425-108		3	NUT 1/2"-13, G5 NUT, , Hex 1/2"-13, G5
6		217-439		1	PLUG Hex Soc, 1/2"-14 - hex socket, 1/2 inch PT
		L116247		1	GAUGE ASSEMBLY - sight, hydraulic reservoir
7		NSS		2	NOT SERVICED SEPARATELY BOLT - sight gauge, special
8		238-7112		4	O-RING -112, Cl 7, .487" ID x .103" Thk
9		NSS		1	NOT SERVICED SEPARATELY GAUGE - sight, hydraulic reservoir
10		R15536		1	VALVE - relief, air
11		R15538		1	VALVE - inlet, air
		R51319		1	COVER ASSEMBLY - rear, with filler tube
12		NSS		1	NOT SERVICED SEPARATELY COVER - rear, with filler tube
13		R46704		1	BRACKET TAB - locking, filler cap, weld-on
14		L128669		1	CAP - filler
15		D50547		1	GASKET - rear cover
16		160-101		6	BOLT Hex Flg, 3/8"-16 x 3/4", G8, Full Thd - hex flange, 3/8 NC x 3/4 inch, grade 8
17		R46984		1	GASKET - filler cap
18		301-14712		2	SCREW Drive, #12 x 3/4" - drive, round head, No. 12 x 3/4 inch
19		R48634		1	FASTENER HOOK - chain
20		R47786		1	CHAIN (CE) CHAIN - filler cap
21		D93753		1	PADLOCK - includes keys

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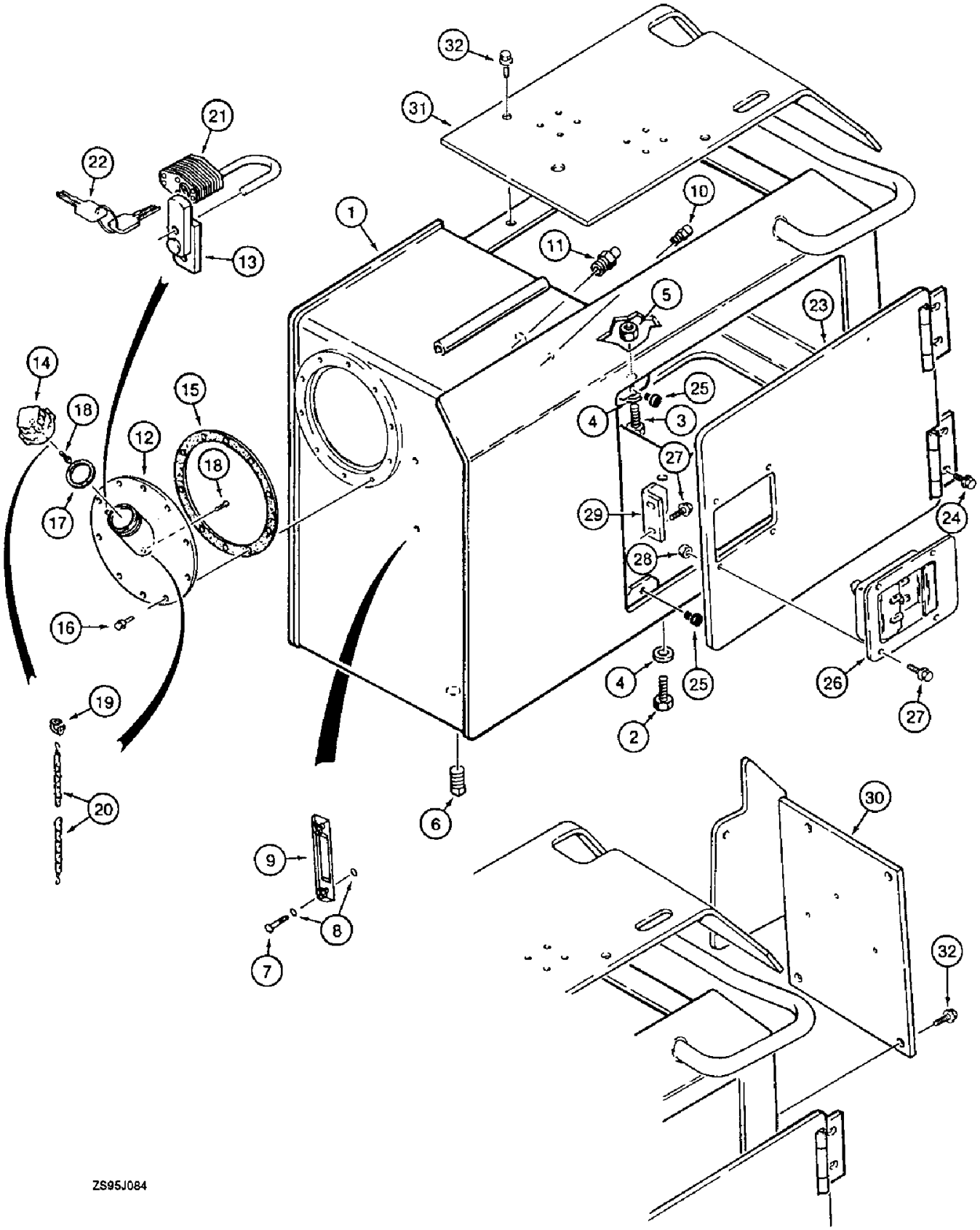
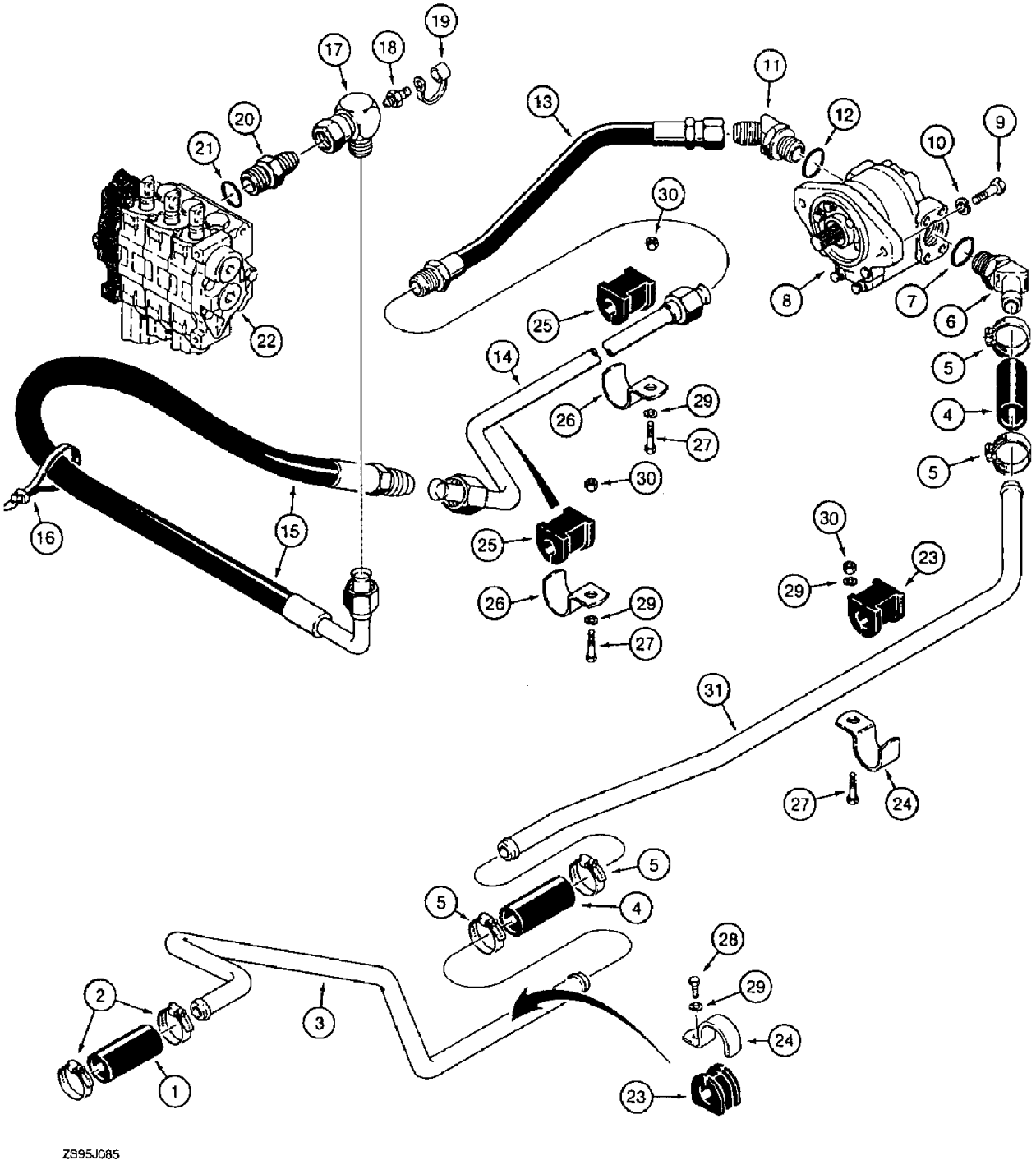
HYDRAULIC RESERVOIR FRAME AND COVERS



HYDRAULIC RESERVOIR FRAME AND COVERS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
22		R29555		2	KEY - for Master padlock only
22		D93751		2	SET OF 2 KEYS KEY - for Yale padlock only
23		R58364		1	COVER - right-hand side, hydraulic reservoir frame
24		160-101		2	BOLT Hex Flg, 3/8"-16 x 3/4", G8, Full Thd - hex flange, 3/8 NC x 3/4 inch, grade 8
25		A161780		2	BUMPER - rubber, side cover
26		R56221		1	LATCH - side cover
27		458-412		6	BOLT Hex Flg, 1/4"-20 x 3/4", G5, Full Thd - hex flange, 1/4 NC x 3/4 inch
28		231-5344		4	BEARING LOCK NUT Flg, 1/4"-20 NUT, LOCK, Flg, 1/4"-20
29		R56397		1	LARGE PLATE STRIKER - latch
30		R58343		1	COVER - front, hydraulic reservoir frame
31		R58323		1	COVER - top, hydraulic reservoir frame
32		160-101		8	BOLT Hex Flg, 3/8"-16 x 3/4", G8, Full Thd - hex flange, 3/8 NC x 3/4 inch, grade 8

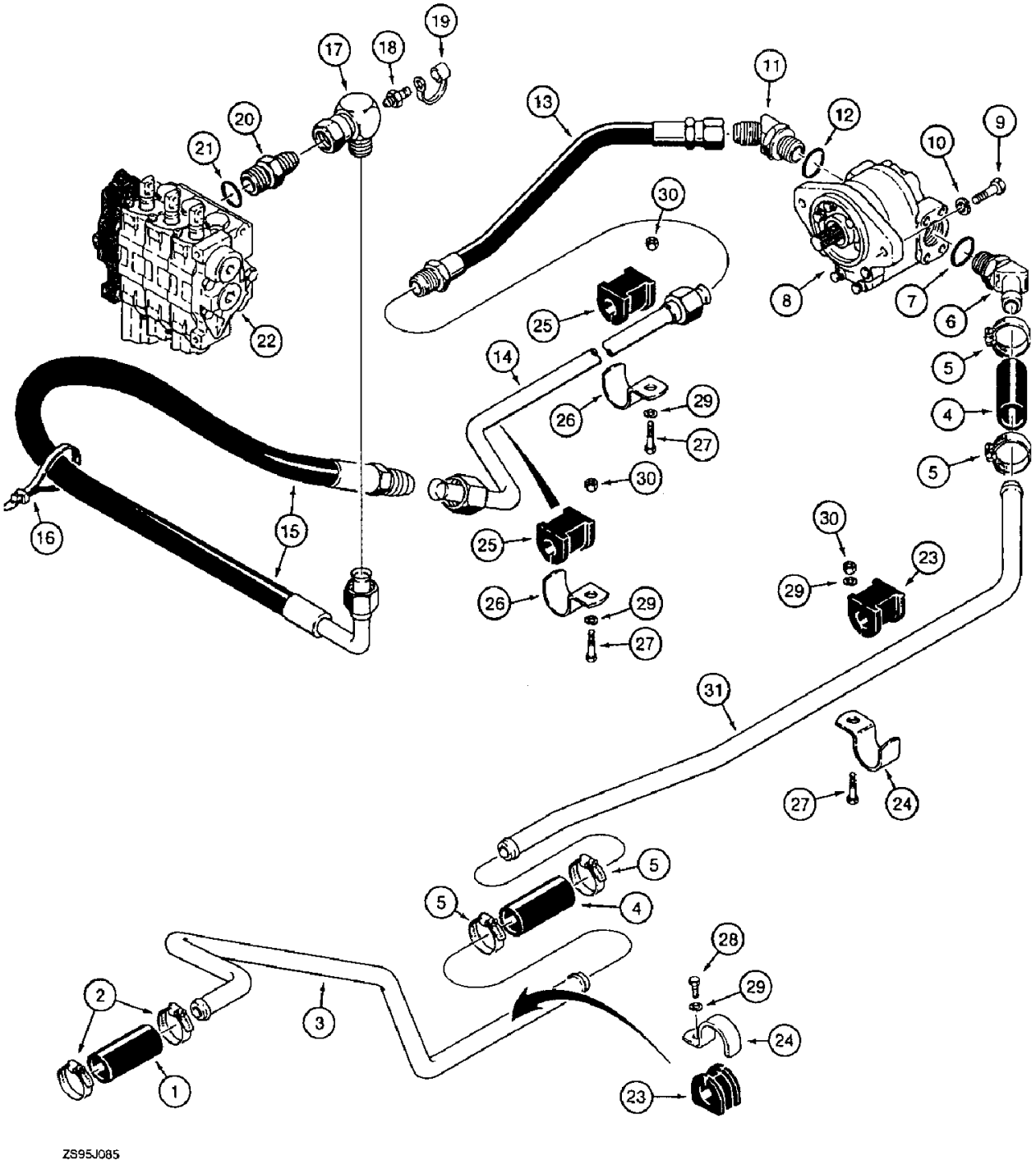
EQUIPMENT HYDRAULIC CIRCUIT, HYDRAULIC RESERVOIR TO PUMP AND CONTROL VALVE



EQUIPMENT HYDRAULIC CIRCUIT, HYDRAULIC RESERVOIR TO PUMP AND CONTROL VALVE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R13911		1	HOSE 31.80 mm ID x 101.60 mm ID, SAE 100R3 - cut from S118465X bulk hose 31.80 mm ID x 101.60 mm ID, SAE 100R3
2		214-3228		2	HOSE CLAMP 1.00/1.875 HD Worm, W/liner CLAMP, HOSE, 1.00/1.875 HD Worm, W/liner
3		R47059		1	TUBE 31.75 - 33.35 mm OD - from hydraulic reservoir
4		D36350		2	HOSE - 3 inch (76 mm) long, cut from S118465X bulk hose
5		214-3132		4	HOSE CLAMP 1.25/2.125 HD Worm CLAMP - adj, 1-1/4 - 2-1/8 inch dia
6		139110A1		1	ELBOW - 45 degree,1-5/8-12 inch adj O-ring boss, pump inlet
7		237-6020		1	O-RING 0.864" ID x 1.004" OD x 0.07" 20-1, 90 Duro, 1.475" ID x .118" Thk
8		R43429		1	PUMP ASSEMBLY - equipment, parts list figure 8-8
9		413-824		2	BOLT Hex, 1/2"-13 x 1 1/2", G5, Full Thd
10		80679		2	LOCK WASHER 1/2" WASHER, LOCK, 1/2"
11		218-5140		1	ELBOW 45º, 1 5/16"-12 x 1 5/16"-12, O-Ring - 45 degree, 1-5/16-12 inch flare x adj O-ring boss, pump outlet
12		237-6016		1	O-RING 0.614" ID x 0.754" OD x 0.07" 16-1, 90 Duro, 1.171" ID x .118" Thk
13		R50103		1	HOSE - 15 inch (381 mm) long, from pump
14		R51932		1	TUBE ASSY. 1" OD TUBE - intermediate, from pump to control valve
15		R58762		1	HOSE - 48-1/8 inch (1220 mm) long, supply pressure , to control valve lower inlet port
16		L18337		1	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon
17		R47069		1	ELBOW - 90 degree, special, swivel

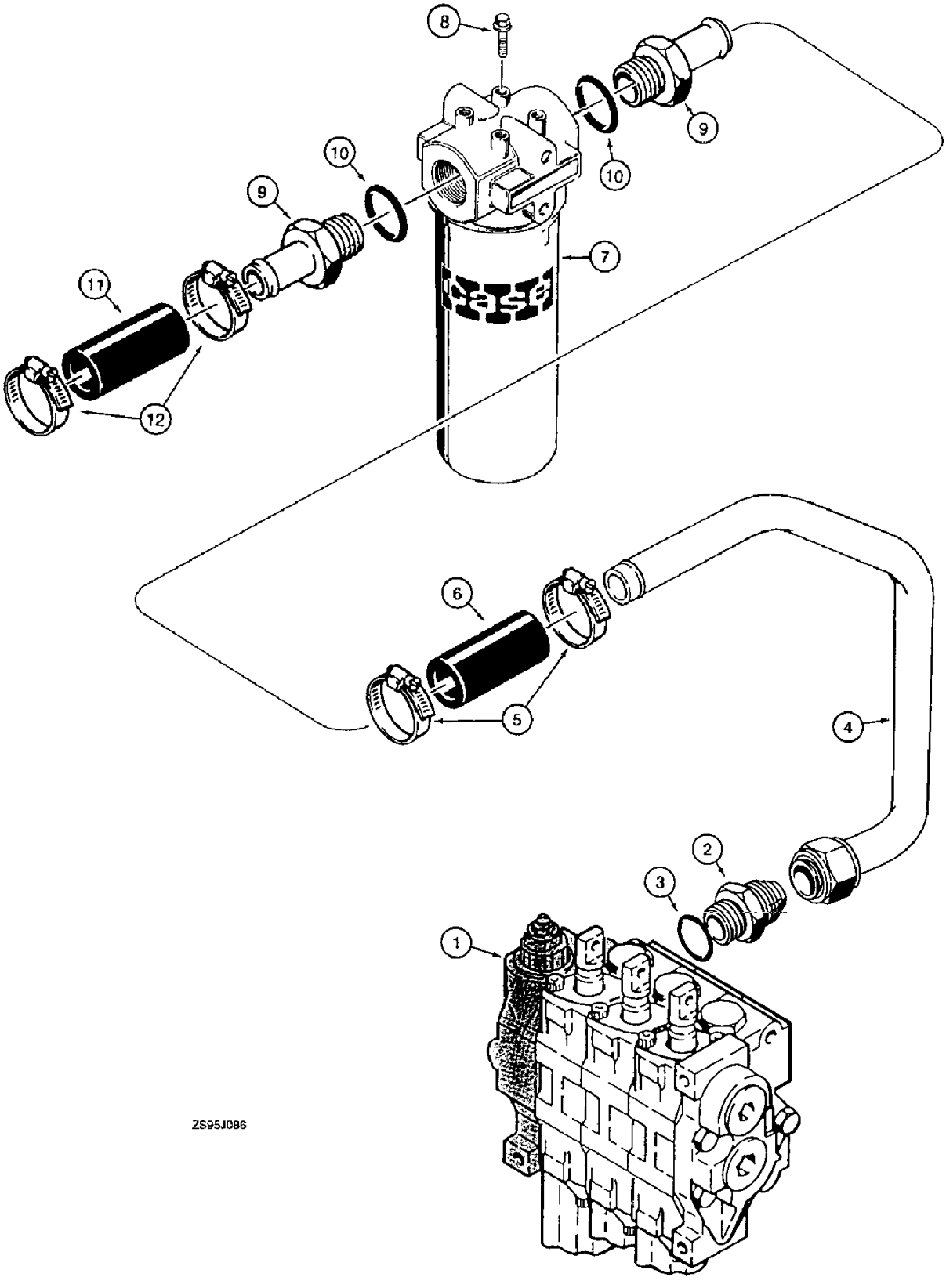
EQUIPMENT HYDRAULIC CIRCUIT, HYDRAULIC RESERVOIR TO PUMP AND CONTROL VALVE



EQUIPMENT HYDRAULIC CIRCUIT, HYDRAULIC RESERVOIR TO PUMP AND CONTROL VALVE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
18		H434164		1	COUPLING COUPLER - quick check
19		H434163		1	DUST CAP CAP - dust
20		218-5050		1	HYD CONNECTOR 1 5/16"-12, 37º x 1 1/16"-12, O-Ring CONNECTOR, HYD., straight, 1-5/16-12 flare x 1-1/16-12 inch O-ring boss
21		237-6012		1	O-RING 0.924" x 0.116" 12-1, 90 Duro, .924 ID x .116" Thk
22		REF		1	INSTRUCTION VALVE ASSEMBLY - equipment control, for correct assembly and components see figure 8-32 or 8-34
23		D67298		2	INSULATOR - rubber, right-hand tubes
24		D68845		2	MOUNTING CLIP CLAMP - right-hand tubes
25		D67297		2	BLOCK INSULATOR - rubber, left-hand tubes
26		D143410		2	CLAMP - left-hand tubes
27		413-620		3	BOLT Hex, 3/8"-16 x 1 1/4", G5, Full Thd - hex, 3/8 NC x 1-1/4 inch
28		413-610		1	BOLT Hex, 3/8"-16 x 5/8", G5, Full Thd
29		492-11038		4	LOCK WASHER 3/8"
30		425-106		3	NUT 3/8"-16, G5
31		R47058		1	TUBE 31.75 - 33.35 mm OD - to pump
		S118465X		UAR	LARGE HOSE HOSE - bulk, 1-1/4 (32) x 1-3/4 (45) x 180 inch (4572 mm) long

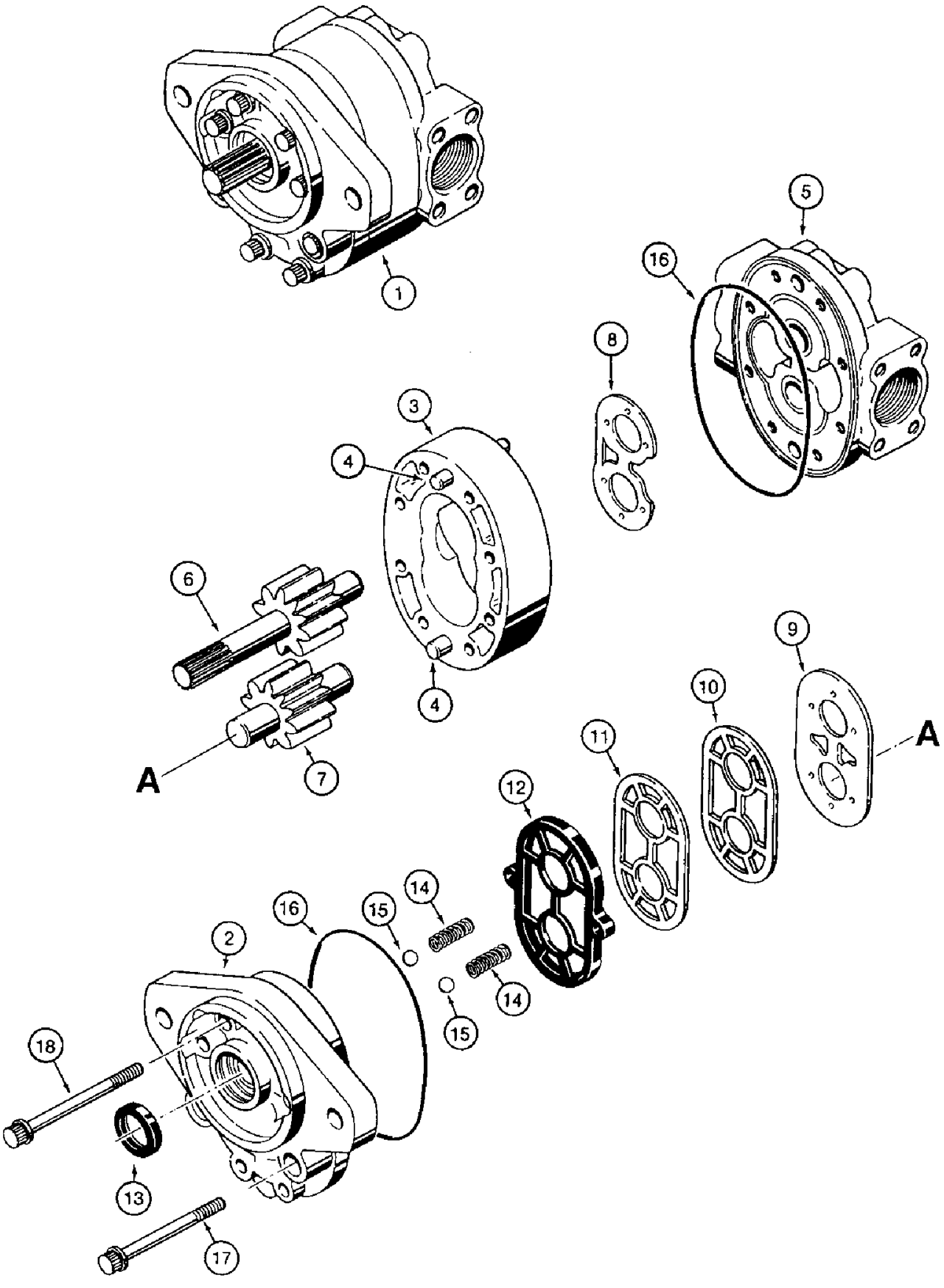
EQUIPMENT HYDRAULIC CIRCUIT, CONTROL VALVE TO HYDRAULIC RESERVOIR



EQUIPMENT HYDRAULIC CIRCUIT, CONTROL VALVE TO HYDRAULIC RESERVOIR

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		REF		1	INSTRUCTION VALVE ASSEMBLY - equipment control, for correct assembly and components see figure 8-34 or 8-36
2		218-5050		1	HYD CONNECTOR 1 5/16"-12, 37º x 1 1/16"-12, O-Ring CONNECTOR, HYD., straight, 1-5/16-12 flare x 1-1/16-12 inch O-ring boss
3		237-6012		1	O-RING 0.924" x 0.116" 12-1, 90 Duro, .924 ID x .116" Thk
4		R58768		1	TUBE 25.4 mm OD - control valve upper outlet port, to filter
5		214-3128		2	HOSE CLAMP 1.00/1.875 HD Worm CLAMP - adj, 1 - 1-7/8 inch dia
6		D38435		1	HOSE - 3-1/2 inch (89 mm) long, cut from S118383X bulk hose
7		R50518		1	FILTER ASSEMBLY - oil, see figure 6-44
8		160-101		4	BOLT Hex Flg, 3/8"-16 x 3/4", G8, Full Thd - hex flange, 3/8 NC x 3/4 inch, grade 8
9		217-179		2	FITTING 1" Hose X 1 5/16"-12 ORB, Beaded Adapter 1" Hose X 1 5/16"-12 ORB, Beaded
10		237-6016		1	O-RING 0.614" ID x 0.754" OD x 0.07" 16-1, 90 Duro, 1.171" ID x .118" Thk
11		R13912		1	HOSE 25.40 mm ID x 133.40 mm ID, SAE 100R3 - cut from S118383X bulk hose, to hydraulic reservoir 25.40 mm ID x 133.40 mm ID, SAE 100R3
12		214-3128		2	HOSE CLAMP 1.00/1.875 HD Worm CLAMP - adj, 1 - 1-7/8 inch dia, adjustable
		S118383X			LARGE HOSE HOSE - bulk, 1 (25) x 1-1/2 (38) x 192 inch (4877 mm) long

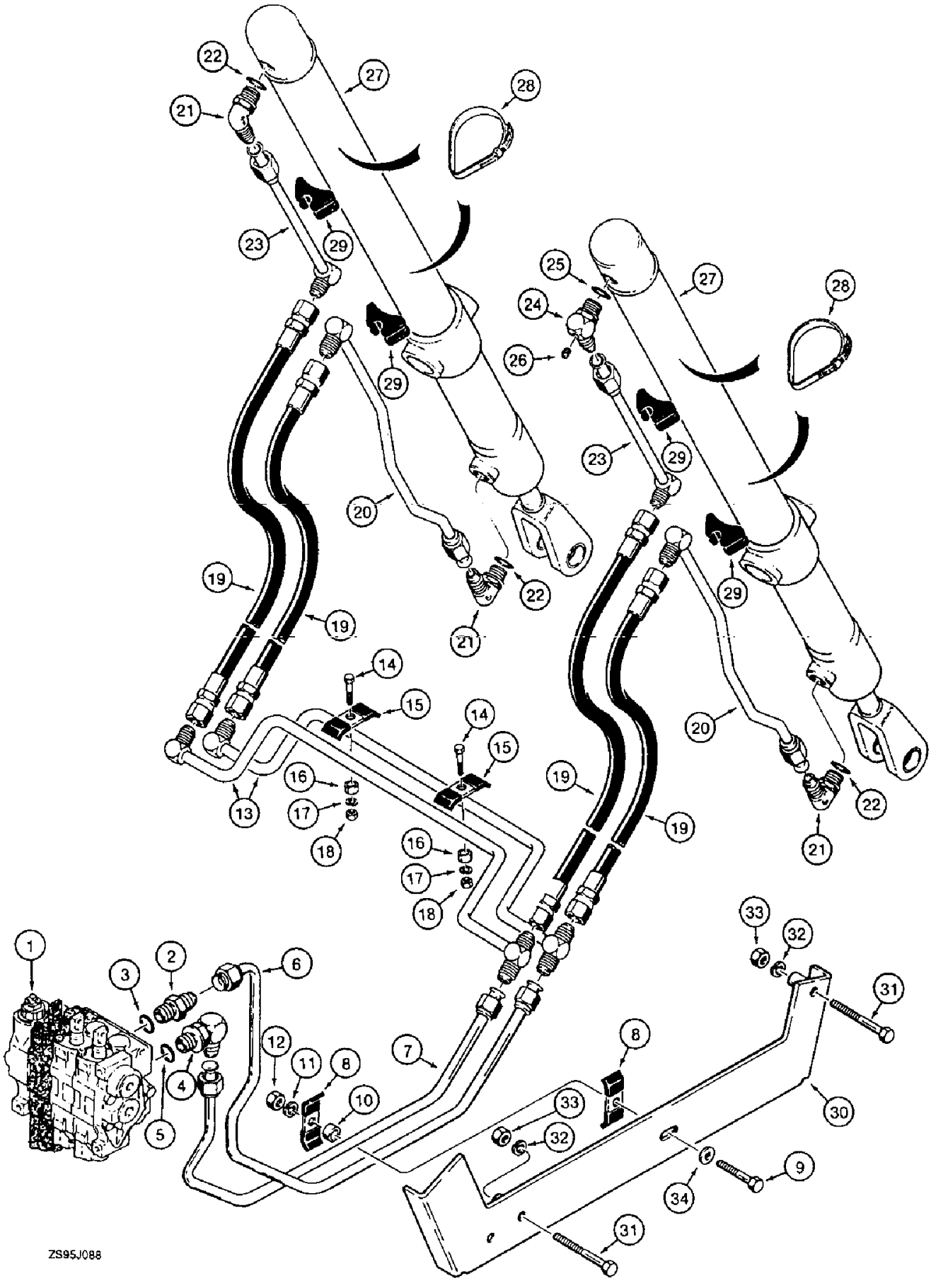
EQUIPMENT HYDRAULIC PUMP



EQUIPMENT HYDRAULIC PUMP

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R43429		1	PUMP ASSEMBLY - equipment, new, Cessna No. 24503-LAY
1		RR43429		1	REMAN-HYD PUMP PUMP ASSEMBLY - equipment, remanufactured, component parts shown on this figure do not apply to the remanufactured assembly
1		RC43429		1	CORE-HYDRAULIC PUMP RETURN NUMBER - use this part number to return pump core for credit when using a remanufactured assembly
2		D48879		1	COVER - drive shaft end
		N6022		1	HOUSING KIT - body
3		NSS		1	NOT SERVICED SEPARATELY BODY - pump center
4		A43667		2	DOWEL PIN - dowel
5		D48883		1	COVER - port end
6		N6021		1	PINION GEAR - drive, includes shaft
7		N6020		1	PINION GEAR - idler, includes shaft
		D59656		1	GASKET KIT KIT - seal
8		A45358		1	PLATE - thrust
9		H335331		1	DIAPHRAGM - pump
10		H260935		1	GASKET - protector
11		H260927		1	GASKET - backup
12		H273912		1	SEAL - diaphragm
13		A25139		1	SEAL - drive shaft
14		D31403		2	SPRING - ball retaing
15		211-1013		2	BALL 13/32" Dia - chrome alloy steel, 13/32 inch, grade 24
16		238-6159		2	O-RING -159, 90 Duro, 4.977" ID x .103" Thk Pump -159, 90 Duro, 4.977" ID x .103" Thk
17		166-53		4	SCREW BOLT - 12 point flange, 3/8 NC x 3 inch, grade 8
18		166-54		4	12 PT SCREW 12 Pt Flg, 3/8"-16 x 3 1/4", G8 BOLT - 12 point flange, 3/8 NC x 3-1/4 inch, grade 8

DOZER LIFT HYDRAULIC CIRCUIT

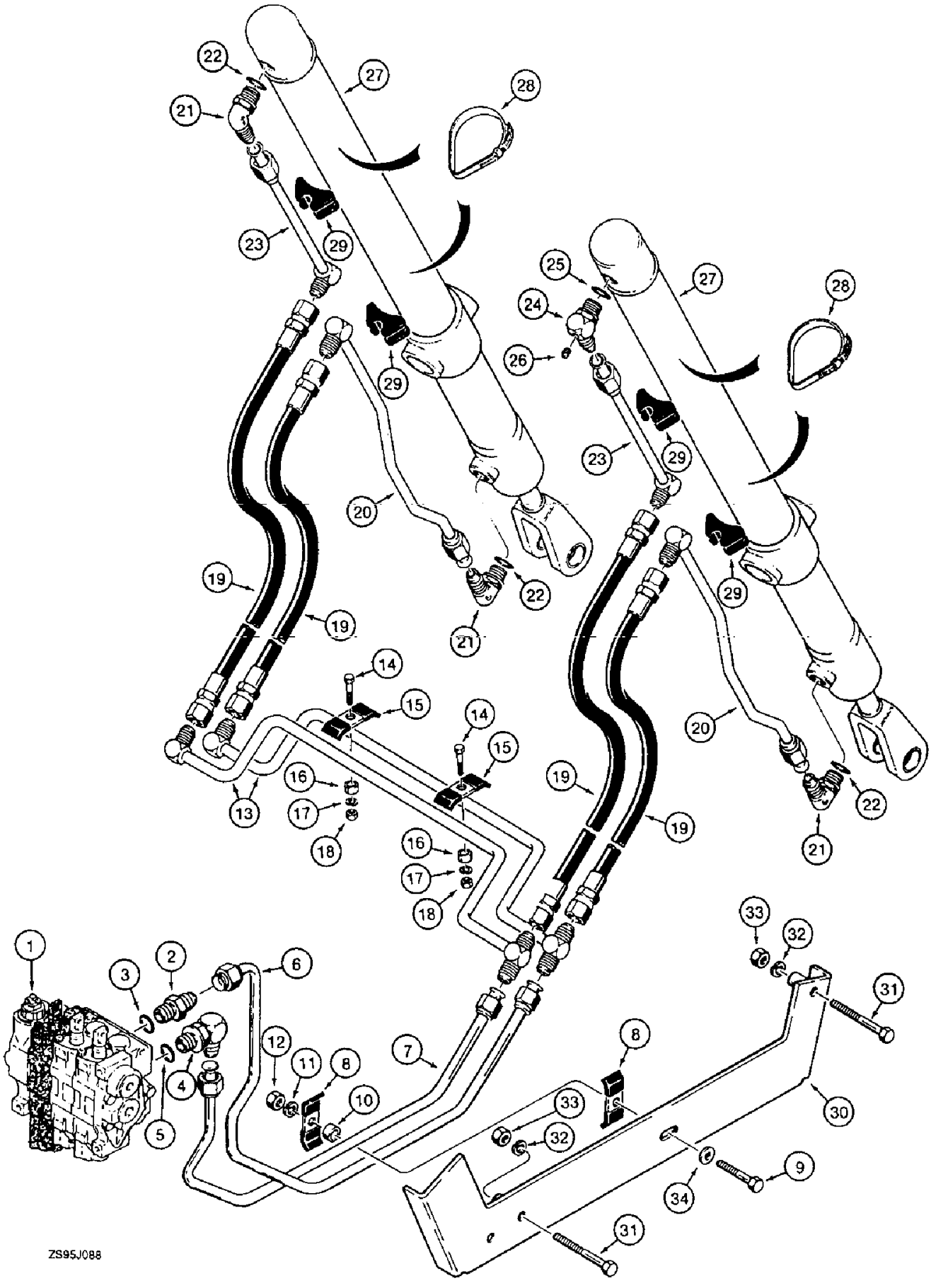


DOZER LIFT HYDRAULIC CIRCUIT

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		REF		1	INSTRUCTION VALVE ASSEMBLY - equipment control, for correct assembly and components see figure 8-34 or 8-36
2		218-5062		1	HYD CONNECTOR 7/8"-14, 37º x 7/8"-14, O-Ring ADAPTER - straight, 7/8-14 inch flare x O-ring boss, upper port
3		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
4		218-5107		1	ELBOW 90º, 7/8"-14, 37º x 7/8"-14, O-Ring - 90 degree, 7/8-14 inch flare x adj O-ring boss, lower port
5		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
6		R58749		1	TUBE 15.88 mm OD - from lift section upper port to cylinder rod end
7		R58751		1	TUBE 15.88 mm OD - from lift section lower port to cylinder closed end
8		D31782		2	FIXING BRACKET CLAMP - tubes
9		413-844		1	BOLT Hex, 1/2"-13 x 2 3/4", G5 - hex, 1/2 NC x 2-3/4 inch
10		R40879		1	SPACER - clamps
11		80679		1	LOCK WASHER 1/2" WASHER, LOCK, 1/2"
12		425-108		1	NUT 1/2"-13, G5 NUT, , Hex 1/2"-13, G5
13		R58761		2	TUBE 15.9 mm OD x 648, 155 mm L - crossover
14		413-632		2	BOLT Hex, 3/8"-16 x 2", G5 - hex, 3/8 NC x 2 inch
15		D40236		2	CLAMP - tubes
16		D146035		2	SPACER - clamp
17		492-11038		2	LOCK WASHER 3/8"
18		425-106		2	NUT 3/8"-16, G5
19		L46723		4	HOSE - 42 inch (1067 mm)
20		D36138		2	HOSE ASSY. TUBE - to rod end of cylinder

NOTE: For lift cylinder mounting see figure 9-2.

DOZER LIFT HYDRAULIC CIRCUIT

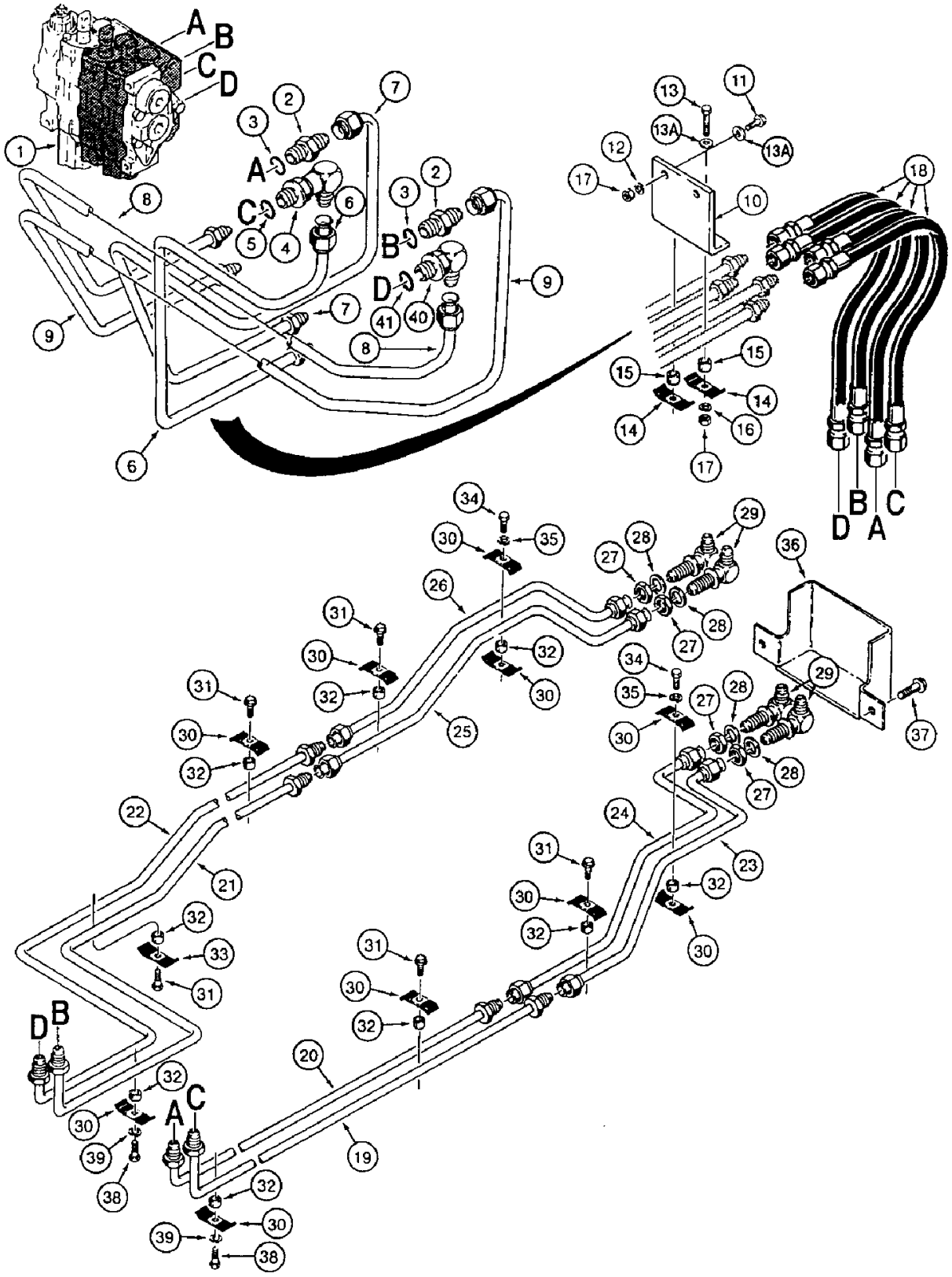


DOZER LIFT HYDRAULIC CIRCUIT

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
21		218-5107		3	ELBOW 90º, 7/8"-14, 37º x 7/8"-14, O-Ring - 90 degree, 7/8-14 inch flare x adj O-ring boss, adj
22		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
23		D34747		2	TUBE - to closed end of cylinder
24		R19576		1	FITTING ELBOW - 90 degree, special, adjustable
25		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
26		217-430		1	PLUG Hex Soc, 1/8"-27 - hex socket, 1/8 inch PT
27		1542565C1		2	CYLINDER ASSEMBLY - 2-1/2 (64) ID x 28 inch (711 mm) stroke, parts list figure 8-20
28		214-1452		4	HOSE CLAMP #52, 2.81/3.75 Type F Worm CLAMP - adj, 2-13/16 - 3-3/4 inch dia, tube to cylinder
29		D38648		4	BLOCK SPACER - rubber, tubes
30		R48281		1	GUARD - tubes, right-hand side
31		413-844		2	BOLT Hex, 1/2"-13 x 2 3/4", G5 - hex, 1/2 NC x 2-3/4 inch
32		80679		2	LOCK WASHER 1/2" WASHER, LOCK, 1/2"
33		425-108		2	NUT 1/2"-13, G5 NUT, , Hex 1/2"-13, G5
34		495-11053		1	WASHER 1/2", SAE (17/32" x 1-1/16" x 3/32") 1/2", SAE

NOTE: For lift cylinder mounting see figure 9-2.

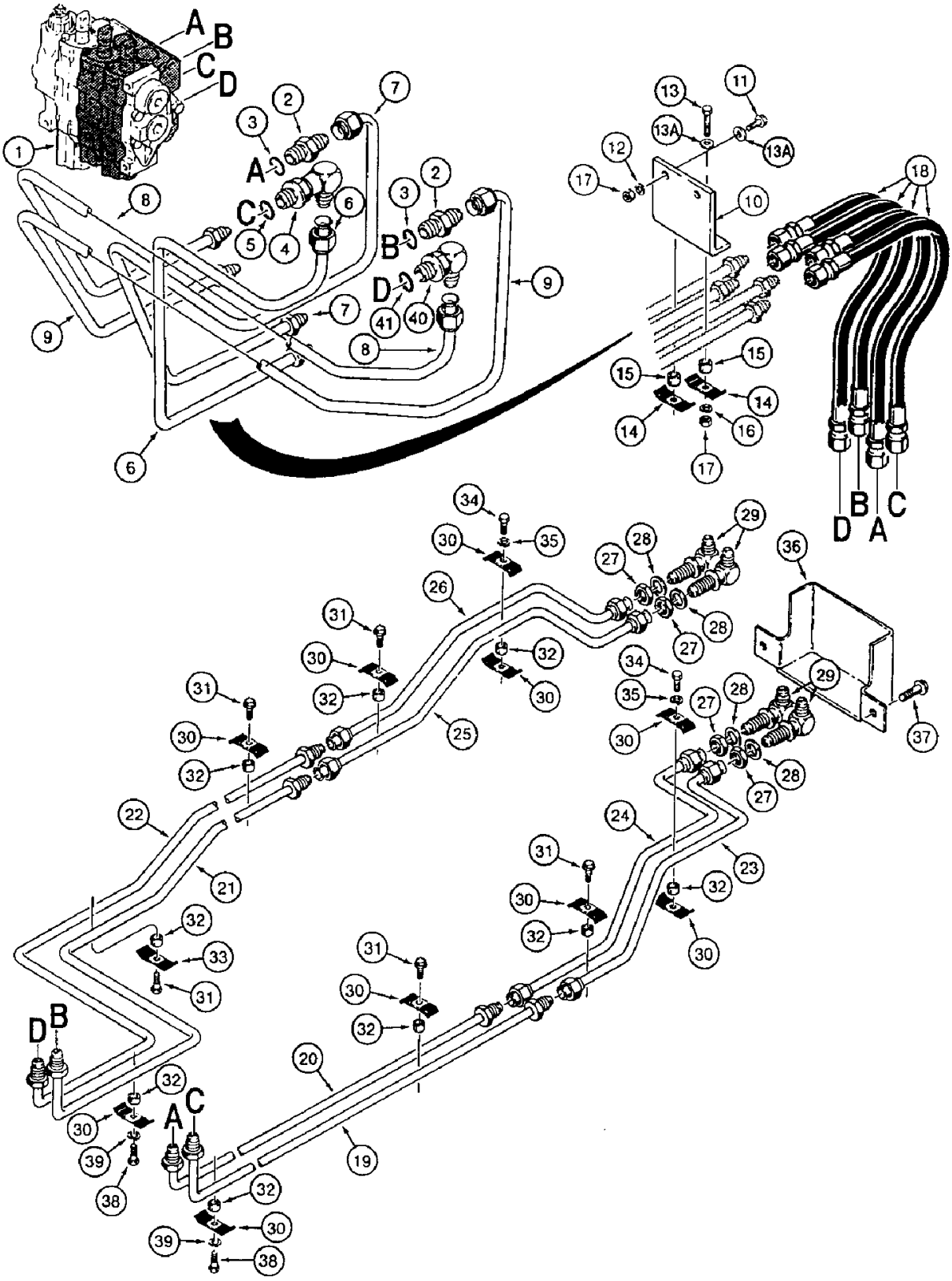
DOZER TILT AND ANGLE HYDRAULIC CIRCUITS, CONTROL VALVE TO GRILLE



DOZER TILT AND ANGLE HYDRAULIC CIRCUITS, CONTROL VALVE TO GRILLE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		REF		1	INSTRUCTION VALVE ASSEMBLY - equipment control, for correct assembly and components see figure 8-34 or 8-36
2		218-5060		2	HYD CONNECTOR 3/4"-16, 37º x 7/8"-14, O-Ring Adapter, straight, O-ring boss 3/4"-16, 37º x 7/8"-14, O-Ring
3		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
4		D36934		1	FITTING ELBOW - 90 degree, special
5		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
6		R58755		1	TUBE 12.7 mm OD - at control valve, tilt section lower port
7		R58753		1	TUBE 12.7 mm OD - at control valve, tilt section upper port
8		R58759		1	TUBE 12.7 mm OD - at control valve, angle section lower port
9		R58757		1	TUBE 12.7 mm OD - at control valve, angle section upper port
10		R58842		1	BRACKET - tube support
11		160-102		2	BOLT Hex Flg, 3/8"-16 x 1", G8, Full Thd
12		492-11038		2	LOCK WASHER 3/8"
13		413-624		2	BOLT Hex, 3/8"-16 x 1 1/2", G5 - hex, 3/8 NC x 1-1/2 inch
13A		495-11041		4	WASHER 3/8", SAE (Flat, 13/32 x 13/16 x 1/16") 3/8", SAE
14		R25528		2	CLAMP - tubes
15		D76208		2	SPACER - clamp
16		492-11038		2	LOCK WASHER 3/8"
17		425-106		4	NUT 3/8"-16, G5
18		{35453}		4	- 22 inch (559 mm) long
19		R39990		1	TUBE 0.5" OD - intermediate, tilt section lower port
20		R39988		1	TUBE 0.5" OD - intermediate, tilt section upper port

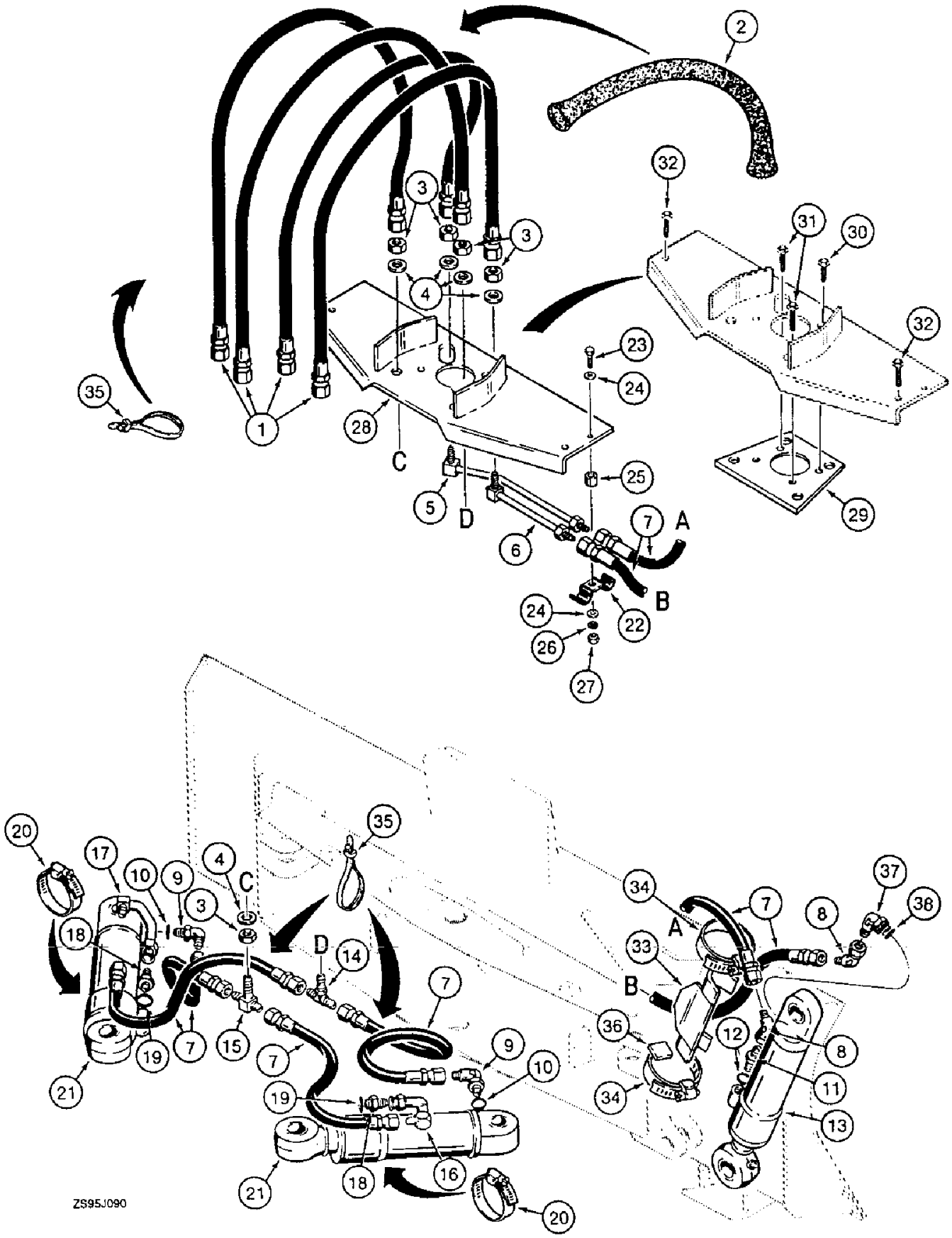
DOZER TILT AND ANGLE HYDRAULIC CIRCUITS, CONTROL VALVE TO GRILLE



DOZER TILT AND ANGLE HYDRAULIC CIRCUITS, CONTROL VALVE TO GRILLE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
21		R40810		1	TUBE 0.5" OD - intermediate, angle section upper port
22		R40812		1	TUBE 0.5" OD - intermediate, angle section lower port
23		R39980		1	TUBE 0.5" OD - to grille, tilt section lower port
24		R39982		1	TUBE 0.5" OD - to grille, tilt section upper port
25		R39986		1	TUBE 0.5" OD - to grille, angle section upper port
26		R39984		1	TUBE 0.5" OD - to grille, angle section lower port
27		218-1255		4	JAM NUT Blkhd, 3/4"-16 NUT, LOCK, Blkhd, 3/4"-16
28		D35268		4	SHIM 1/32" Thk (25/32" ID x 1-1/4" OD) 1/32" Thk
29		R29758		4	FITTING ELBOW - 90 degree, special, bulkhead
30		R25528		10	CLAMP - tubes
31		160-103		5	BOLT Hex Flg, 3/8"-16 x 1 1/4", G8, Full Thd
32		D76208		9	SPACER - clamp
33		R25528		1	CLAMP - angle tubes
34		413-624		2	BOLT Hex, 3/8"-16 x 1 1/2", G5 - hex, 3/8 NC x 1-1/2 inch
35		492-11038		2	LOCK WASHER 3/8"
36		R34008		1	GUARD - bulkhead elbows, at grille
37		160-106		2	BOLT Hex Flg, 1/2"-13 x 1", G8, Full Thd
38		413-620		2	BOLT Hex, 3/8"-16 x 1 1/4", G5, Full Thd - hex, 3/8 NC x 1-1/4 inch
39		492-11038		2	LOCK WASHER 3/8"
40		218-5121		1	ELBOW 90º, 3/4"-16, 37º x 7/8"-14, O-Ring - 90 degree, 3/4-16 flare x 7/8-14 inch adj O-ring boss, adj O-ring, angle section lower port
41		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk

DOZER TILT AND ANGLE HYDRAULIC CIRCUITS, ON BACK OF BLADE

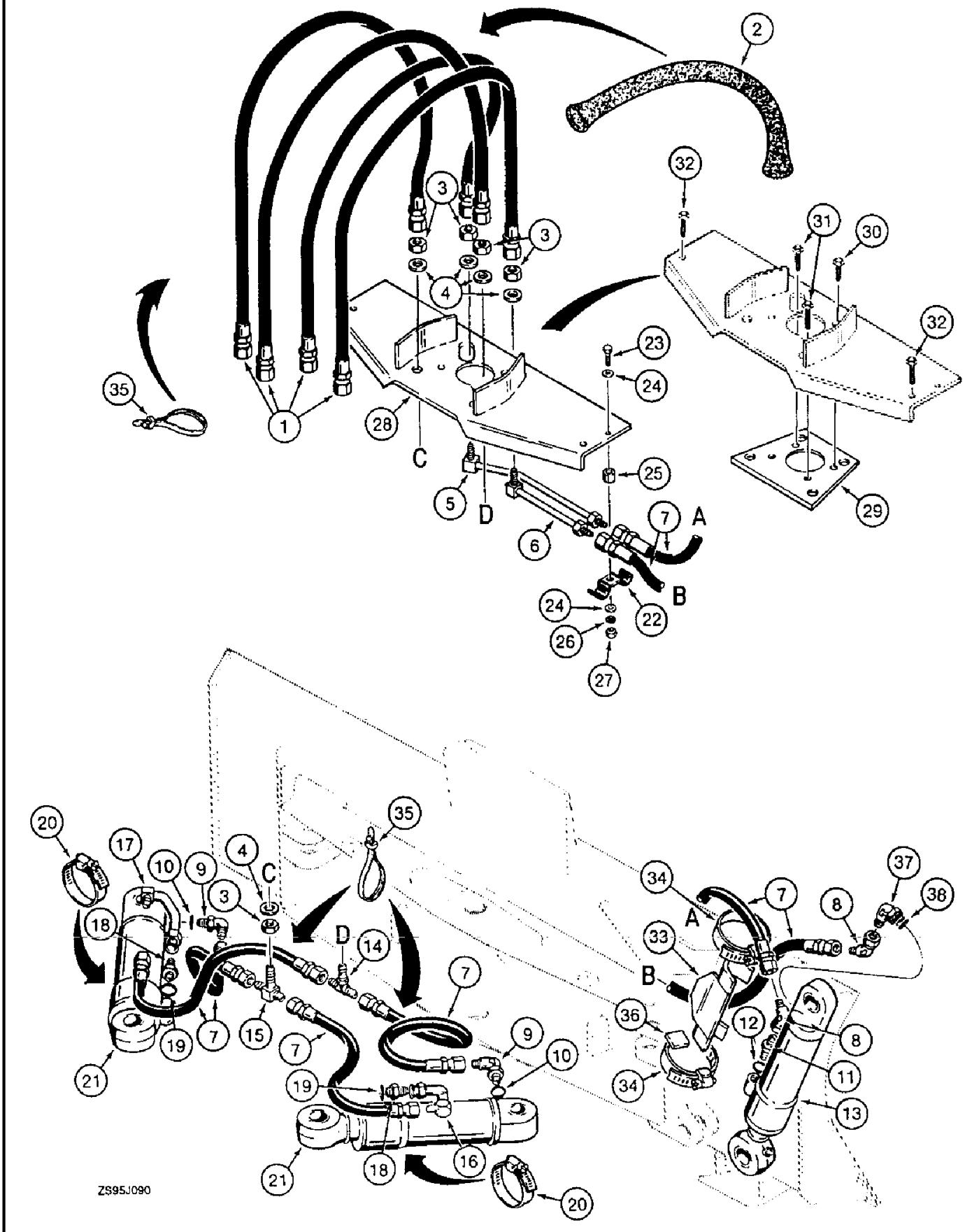


DOZER TILT AND ANGLE HYDRAULIC CIRCUITS, ON BACK OF BLADE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R40023		4	HOSE - 50 inch (1270 mm) long
2		103237A1		1	HOSE WRAP - nylon, hose retaining
3		218-1255		5	JAM NUT Blkhd, 3/4"-16 NUT, LOCK, Blkhd, 3/4"-16
4		D35268		5	SHIM 1/32" Thk (25/32" ID x 1-1/4" OD) 1/32" Thk
5		R41286		1	PIPE 0.5" OD x 15.4, 3.5" L TUBE - tilt circuit, to rod end of tilt cylinder
6		R41288		1	PIPE 0.5" OD x 9.4" L TUBE - tilt circuit, to closed end of tilt cylinder
7		R57608		6	HOSE ASSY. HOSE - 21 inch (534 mm) long
8		218-5173		2	ELBOW 45º, 3/4"-16, 37º x 3/4"-16, 37º Fem Sw - 45 degree, 3/4-16 inch flare x swivel, tilt cylinder
9		218-5121		2	ELBOW 90º, 3/4"-16, 37º x 7/8"-14, O-Ring - 90 degree, 3/4-16 flare x 7/8-14 inch adj O-ring boss
10		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
11		218-5059		1	HYD CONNECTOR 3/4"-16, 37º x 3/4"-16, O-Ring ADAPTER - straight, 3/4-16 inch flare x O-ring boss, O-ring boss, rod end of tilt cylinder
12		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk
13		REF		1	INSTRUCTION CYLINDER ASSEMBLY - 3 (76) ID x 8 inch (203 mm) stroke, parts list figure 8-22
14		218-805		1	TEE 3/4"-16, 37º, Blkhd - 3/4-16 inch bulkhead flare branch x flare, right-hand, angle circuit
15		R28969		1	FITTING TEE - bulkhead, special, left-hand, angle circuit
16		R52691		1	TUBE 0.5" OD - to rod end of right-hand angle cylinder

NOTE: For tilt cylinder mounting see figure 9-4. For angle cylinder mounting see figure 9-2.

DOZER TILT AND ANGLE HYDRAULIC CIRCUITS, ON BACK OF BLADE

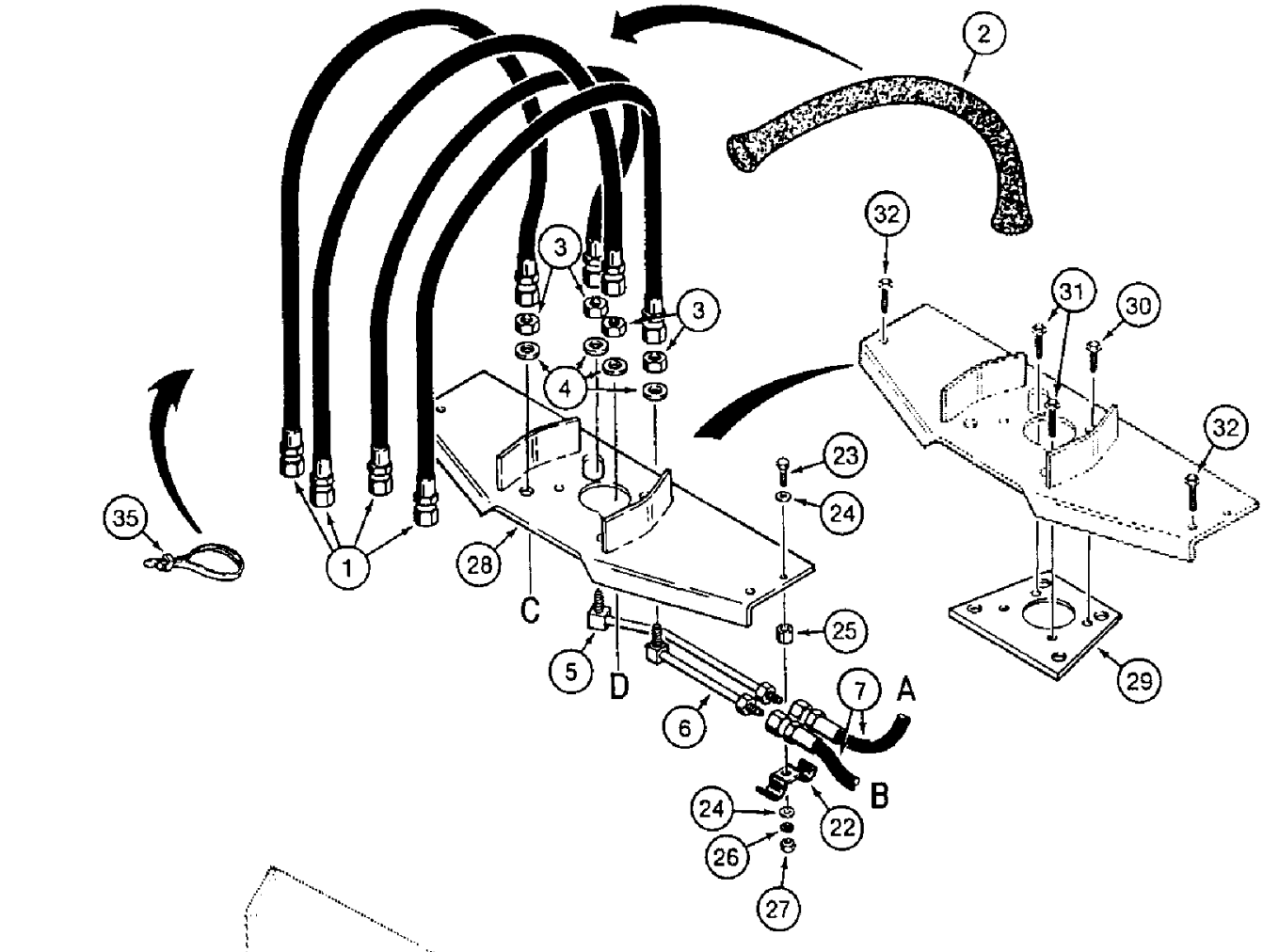


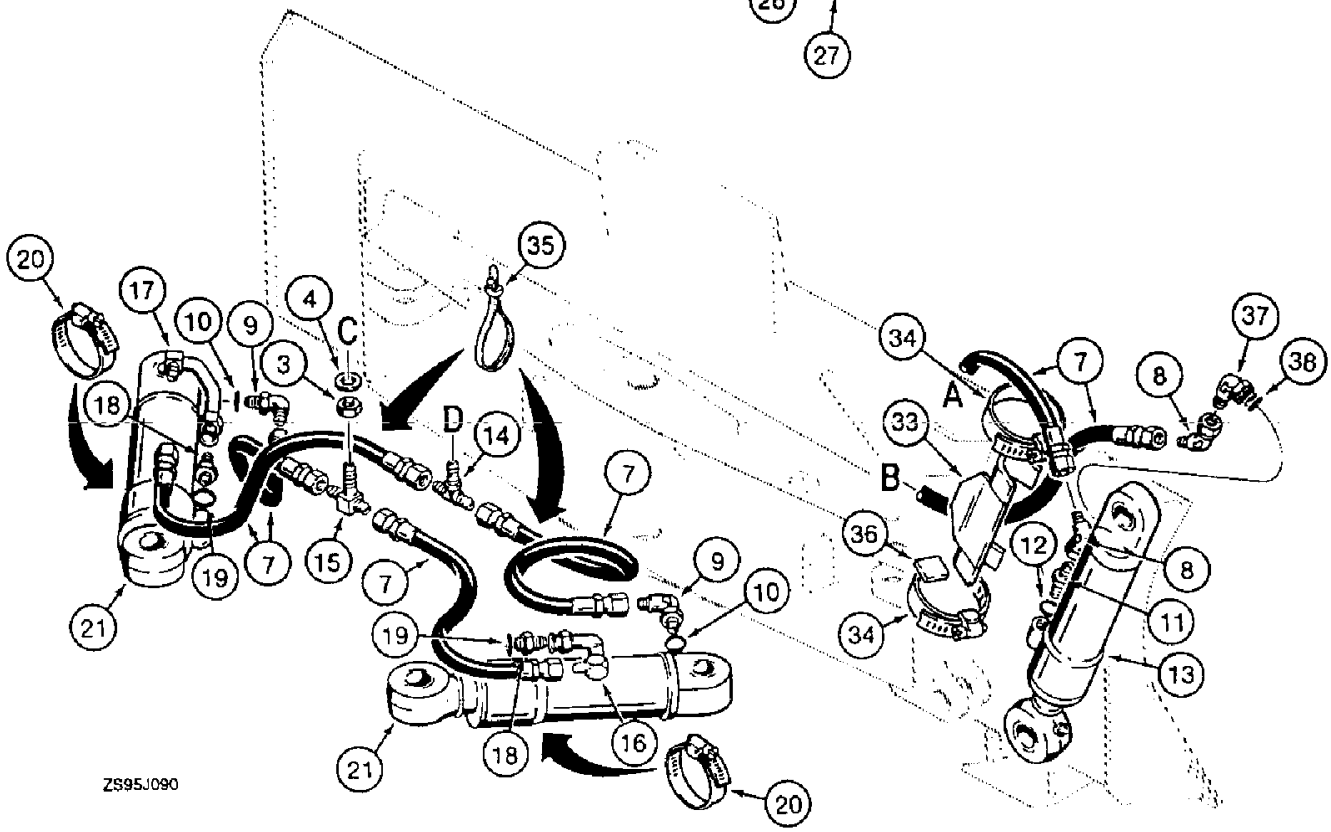
DOZER TILT AND ANGLE HYDRAULIC CIRCUITS, ON BACK OF BLADE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
17		R52689		1	TUBE 0.5" OD - to rod end of left-hand angle cylinder
18		218-5060		2	HYD CONNECTOR 3/4"-16, 37º x 7/8"-14, O-Ring Adapter, straight, O-ring boss, rod end of angle cylinder 3/4"-16, 37º x 7/8"-14, O-Ring
19		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
20		214-1476		2	HOSE CLAMP #76, 4.31/5.25 Type F Worm, W/liner CLAMP, HOSE, , Adj. #76, 4.31/5.25 Type F Worm, W/liner
21		REF		2	INSTRUCTION CYLINDER ASSEMBLY - 4 (102) ID x 8-5/16 inch (211 mm) stroke, parts list figure 8-24
22		R15257		1	CLAMP - tilt circuit hoses
23		413-528		1	BOLT Hex, 5/16"-18 x 1 3/4", G5
24		495-11034		2	WASHER 5/16", SAE 5/16" SAE (flat, 11/32 x 11/16 x 1/16")
25		D38524		1	SPACER - tilt circuit hoses
26		492-11031		1	LOCK WASHER 5/16" WASHER, LOCK, 5/16"
27		425-105		1	NUT 5/16"-18, G5
28		R57819		1	GUARD - and tubes
29		R54466		1	LARGE PLATE PLATE - bulkhead support, and tube mounting
30		160-106		4	BOLT Hex Flg, 1/2"-13 x 1", G8, Full Thd Guard to plate Hex Flg, 1/2"-13 x 1", G8, Full Thd
31		160-108		2	BOLT Hex Flg, 1/2"-13 x 1 1/2", G8, Full Thd - hex flange, 1/2 NC x 1-1/2 inch, grade 8, plate to leveling beam
32		121-433		2	FLANGE BOLT Hex Flg, 1/2"-13 x 2", G8 BOLT - hex flange, 1/2 NC x 2 inch, grade 8, guard to leveling beam
33		R41284		1	GUARD - tilt cylinder
34		214-3180		2	HOSE CLAMP 4.25/5.125 HD Worm CLAMP - adj, 4-1/4 - 5-1/8 inch dia, tilt cylinder guard

NOTE: For tilt cylinder mounting see figure 9-4. For angle cylinder mounting see figure 9-2.

DOZER TILT AND ANGLE HYDRAULIC CIRCUITS, ON BACK OF BLADE



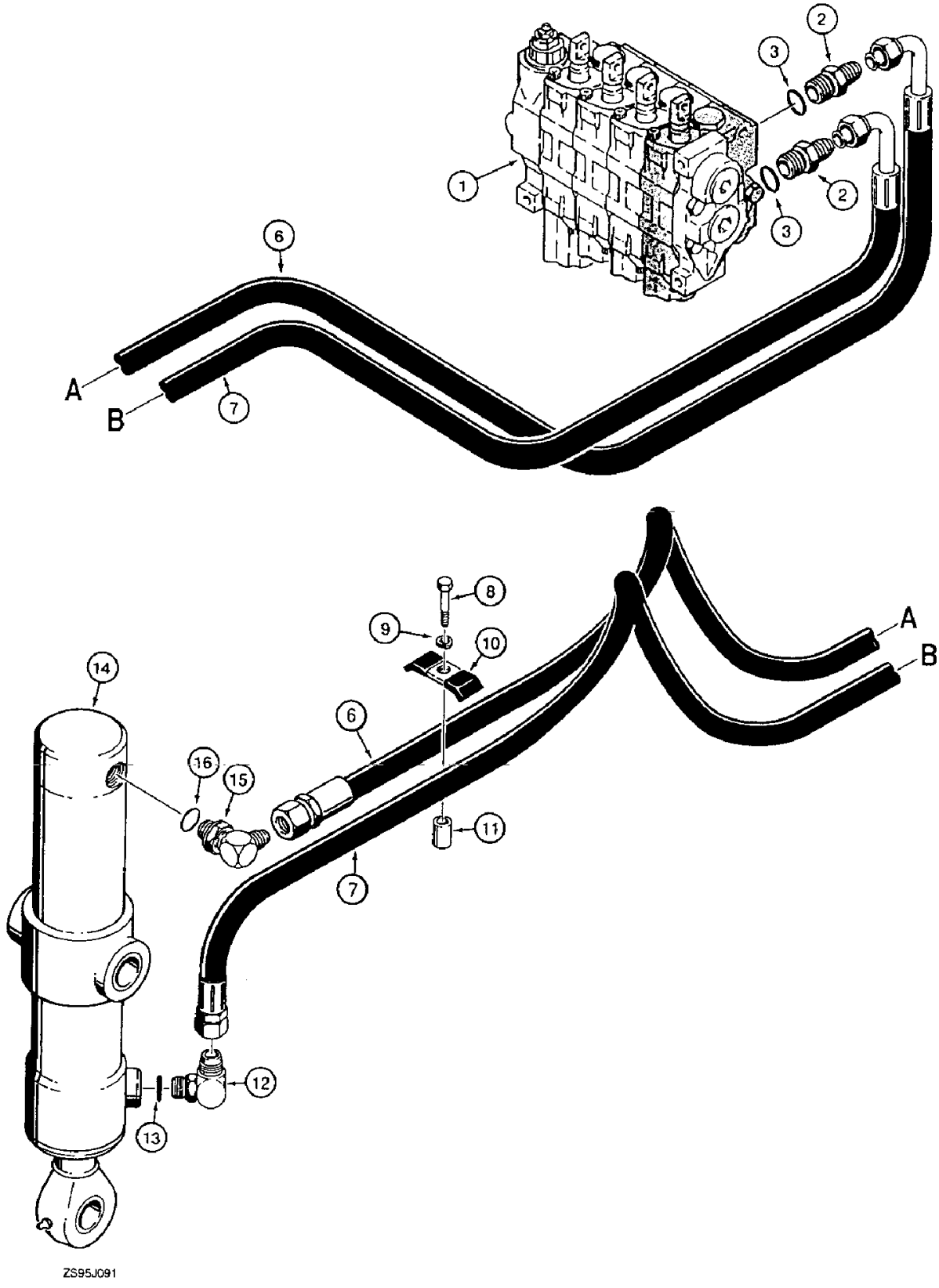


DOZER TILT AND ANGLE HYDRAULIC CIRCUITS, ON BACK OF BLADE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
35		L18337		4	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon
36		D42402		1	GAUGE - leveling, weld to tilt cylinder guard, align with leveling beam
37		218-5106		1	ELBOW 90º, 3/4"-16, 37º x 3/4"-16, O-Ring - 90 degree, 3/4-16 inch flare x adj O-ring boss, adj O-ring boss, closed end of tilt cylinder
38		237-6008		1	O-RING 0.176" ID x 0.316" OD x 0.07" 8-1, 90 Duro, .644" ID x .087" Thk

NOTE: For tilt cylinder mounting see figure 9-4. For angle cylinder mounting see figure 9-2.

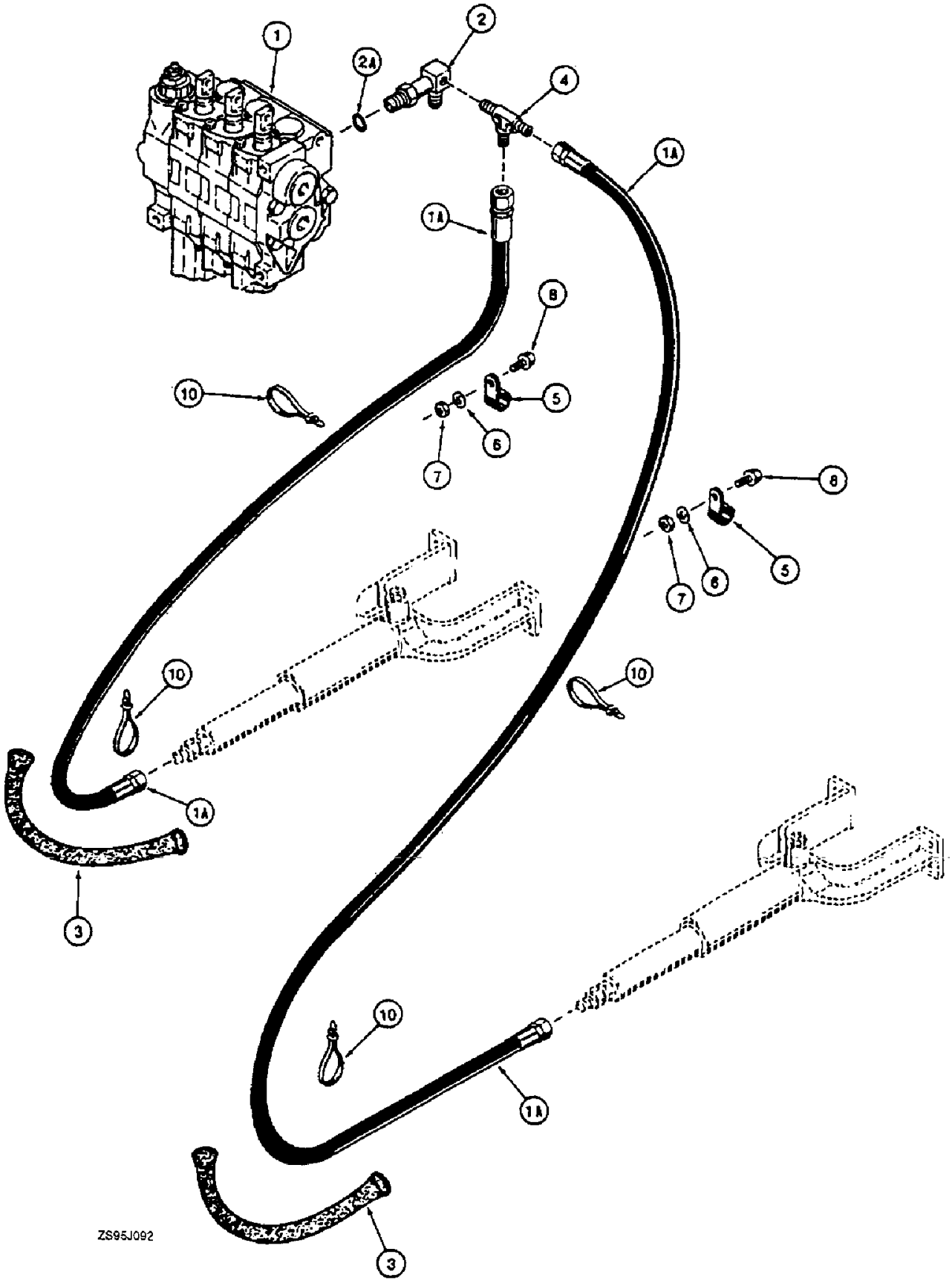
RIPPER HYDRAULIC CIRCUIT



RIPPER HYDRAULIC CIRCUIT

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58221		1	VALVE ASSEMBLY - equipment control, parts list figure 8-36
2		218-5062		2	HYD CONNECTOR 7/8"-14, 37º x 7/8"-14, O-Ring ADAPTER - straight, 7/8-14 inch flare x O-ring boss
3		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
6		R47442		1	HOSE - 60 inch (1524 mm) long, auxiliary section upper port to closed end of cylinder
7		R50321		1	HOSE ASSY. HOSE - 54 inch (1372 mm) long, , auxiliary section lower port to rod end of cylinder
8		413-624		1	BOLT Hex, 3/8"-16 x 1 1/2", G5 - hex, 3/8 NC x 1-1/2 inch
9		492-11038		1	LOCK WASHER 3/8"
10		R25782		1	CLAMP - hose
11		A19177		1	SPACER - clamp
12		R20839		1	FITTING ELBOW - 90 degree, adjustable, restricted
13		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
14		REF		1	INSTRUCTION CYLINDER ASSEMBLY - 3 (76) ID x 10-1/2 inch (267 mm) stroke, parts list figure 8-26
15		218-5107		1	ELBOW 90º, 7/8"-14, 37º x 7/8"-14, O-Ring - 90 degree, 7/8-14 inch flare x adj O-ring boss
16		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk

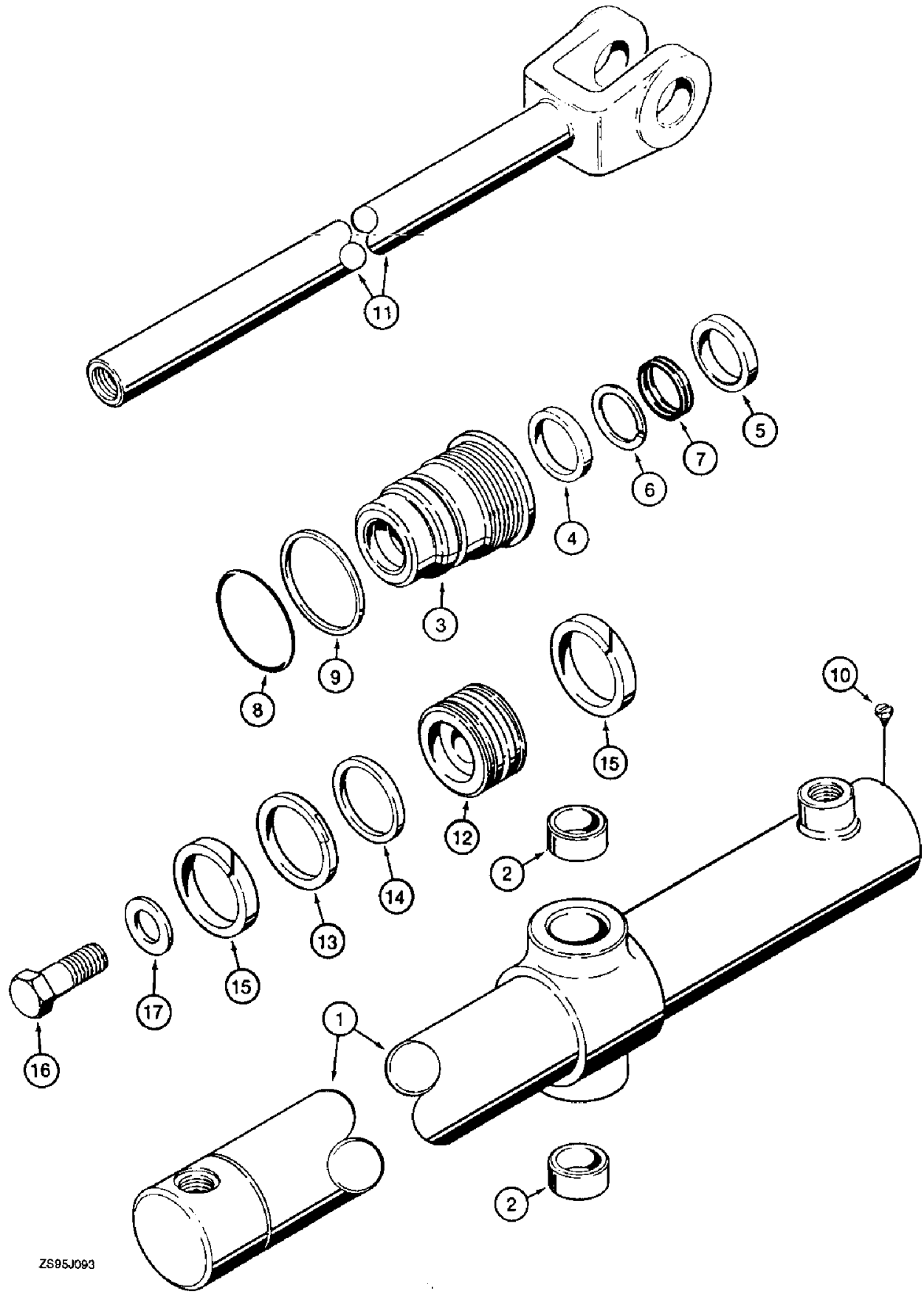
TRACK TENSIONER HYDRAULIC CIRCUIT, FOR UNITS WITH RUBBER TRACKS ONLY



TRACK TENSIONER HYDRAULIC CIRCUIT, FOR UNITS WITH RUBBER TRACKS ONLY

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58221		1	VALVE ASSEMBLY - equipment control, four spool, parts list figure 8-36
1A		125093A1		2	HYDRAULIC HOSE HOSE - 122 inch (3099 mm) long, equipment valve to track adjuster
2		123816A1		1	ELBOW - 90 degree adj, special with check port
2A		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
3		125104A1		2	SHIELD GUARD - hose
4		218-612		1	TEE 1/2"-20, 37º x 1/8"-27, NPTF Run - 1/2-20 flare branch x flare x 1/8 inch PT
5		{D41564}		2	-P type
6		496-21053		2	WASHER 17/32" x 1 1/16" x .134" - flat, 17/32 x 1-1/16 x 1/8 inch, hardened
7		425-108		2	NUT 1/2"-13, G5 NUT, , Hex 1/2"-13, G5
8		413-816		2	BOLT Hex, 1/2"-13 x 1", G5, Full Thd
9		125266A1		2	LINK - clamp, not shown
10		L18337		8	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon

DOZER LIFT CYLINDER



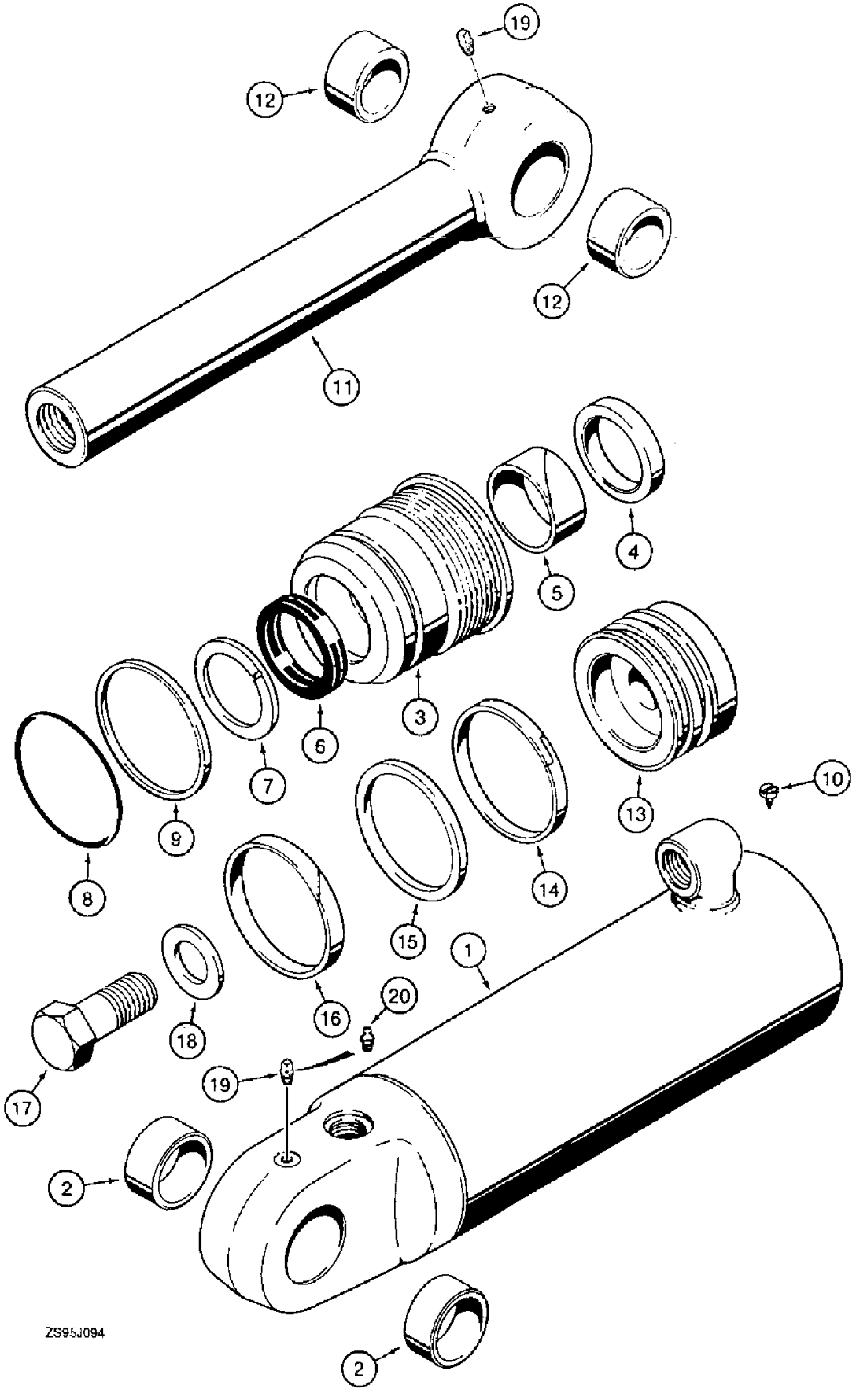
DOZER LIFT CYLINDER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		1542565C1		2	CYLINDER ASSEMBLY - 2-1/2 (64 mm) ID x 28 inch (711 mm) stroke, dozer lift
1		1542753C1		1	TUBE 889 mm Length ASSEMBLY - cylinder
2		30634		2	BUSHING - tube
3		1542751C2		1	GLAND - cylinder
4		G102424		1	BUSHING - Center, Gland
5	1	D95142		1	WIPER SEAL WIPER - piston rod
6	1	NSS		1	NOT SERVICED SEPARATELY SEAL - piston rod, narrow, for service order 1542764C2 seal kit
7	1	NSS		1	NOT SERVICED SEPARATELY SEAL - U-cup, piston rod, wide, with O-ring, for service order 1542764C2 seal kit
8	1	238-5228		1	O-RING -228, 70 Duro, 2.234" ID x .139" Thk
9		G109297			BACK-UP RING
10		276-2446		1	SELF-TAP SCREW Hex Hd, #8 x 3/8" SCREW - self-tapping, hex hd, No. 8 NC x 3/8 ", slotted
11		1542566C1		1	ROD - piston, 1-1/2 inch (38 mm) diameter
12		G100706		1	PISTON - cylinder
13	1	G102289		1	SEAL - piston
14	1	G100713		1	SEALING RING RING - backup, piston seal, piston seal
15	1	G100714		2	RING - wear
16		25863R1		1	BOLT Hex, 3/4-16 x 2 1/2", G8 - hex, 3/4 NF x 2-1/2 inch, grade 8
17		G32317		1	WASHER - flat, hardened, special, special
		1542764C2		1	SEAL KIT KIT - seal, Includes: Refs. 5, 6, 7, 8, 13, 14, and 15

(1) Part of KIT, part number 1542764C2

The cylinder assembly part number is stamped on some cylinder glands or tubes.

DOZER TILT CYLINDER



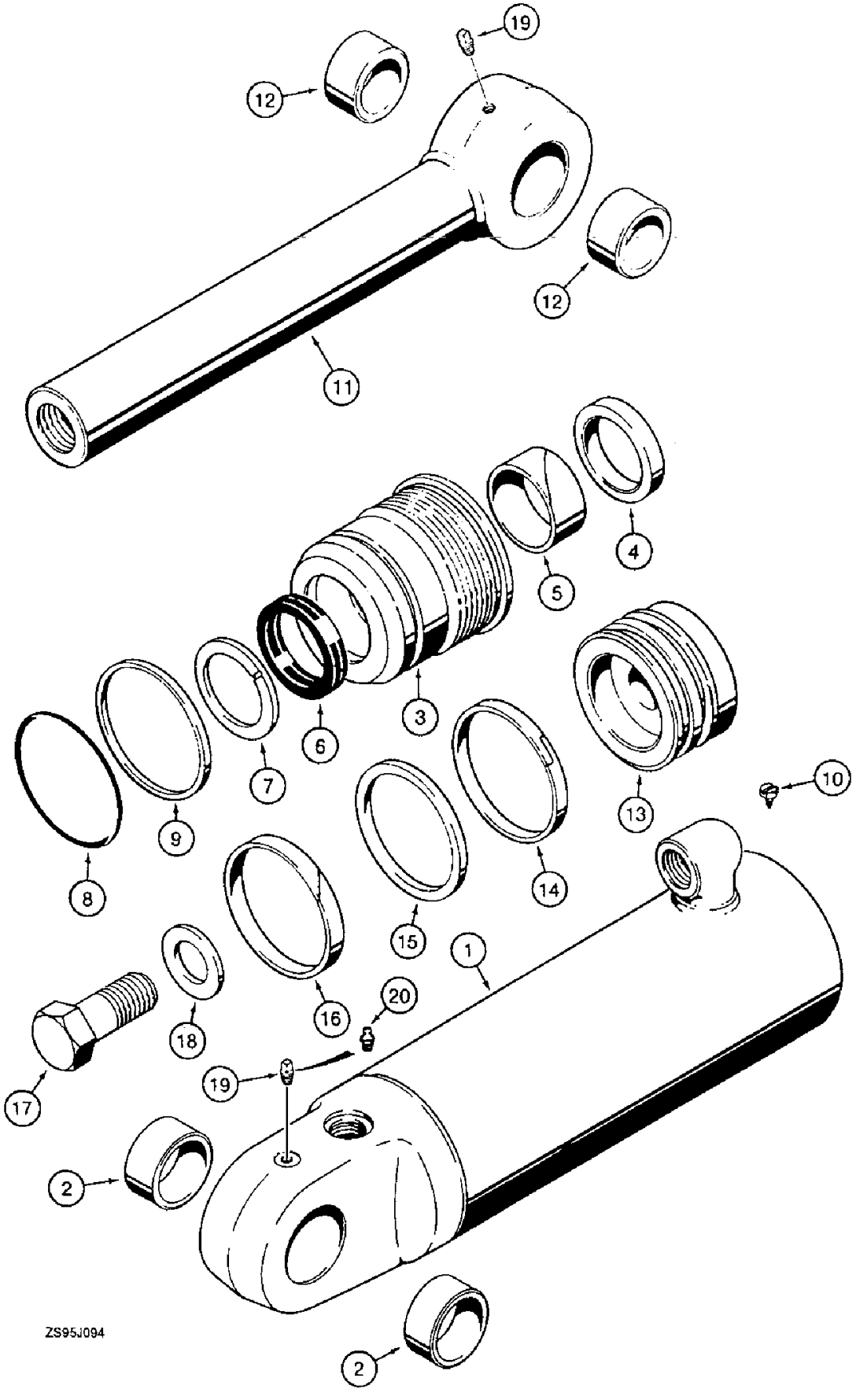
DOZER TILT CYLINDER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		1542717C1		1	CYLINDER ASSEMBLY - 3 (76 mm) ID x 8 inch (203 mm) stroke
1		1542718C1		1	TUBE ASSEMBLY - cylinder
2		D30930		2	BUSHING - 1-1/2 ID x 1-7/8 OD x 11/16 inch long, tube
3		1346417C1		1	GLAND - cylinder
4	1	D95142		1	WIPER SEAL WIPER - piston rod
5	1	G102424		1	BUSHING - Center, Gland
6	1	NSS		1	NOT SERVICED SEPARATELY SEAL - U-cup, piston rod, wide, with O-ring, for service order 1543256C1seal kit
7	1	NSS		1	NOT SERVICED SEPARATELY SEAL - piston rod, narrow, for service order 1543256C1 seal kit
8	1	238-5231		1	O-RING -231, 70 Duro, 2.609" ID x .139" Thk
9	1	G109298		1	RING - backup, gland O-ring
10		276-2446		1	SELF-TAP SCREW Hex Hd, #8 x 3/8" SCREW - self-tapping, hex hd, No. 8 NC x 3/8 ", slotted
11		1542720C1		1	ROD ASSEMBLY - piston, 1-1/2 inch (38 mm) diameter
12		D30930		2	BUSHING - 1-1/2 ID x 1-7/8 OD x 11/16 inch long, piston rod
13		G108518		1	PISTON - cylinder
14	1	G102288		1	SEAL - Piston
15	1	G100444		1	SEALING RING RING - backup, piston seal
16	1	G100449		1	WEAR RING RING - wear
17		25863R1		1	BOLT Hex, 3/4-16 x 2 1/2", G8 - hex, 3/4 NF x 2-1/2 inch, grade 8
18		G32317		1	WASHER - flat, hardened, special
19		217-430		2	PLUG Hex Soc, 1/8"-27 - hex socket, 1/8 inch PT
20		219-1		1	LUBE NIPPLE 1/8"-27 x .66 lg FITTING - grease, straight, 1/8 PT x 21/32 inch, base end of cylinder, if used

(1) Part of Cylinder Seal Repair Kit P/N 1543256C1

The cylinder assembly part number is stamped on some cylinder glands or tubes.

DOZER TILT CYLINDER

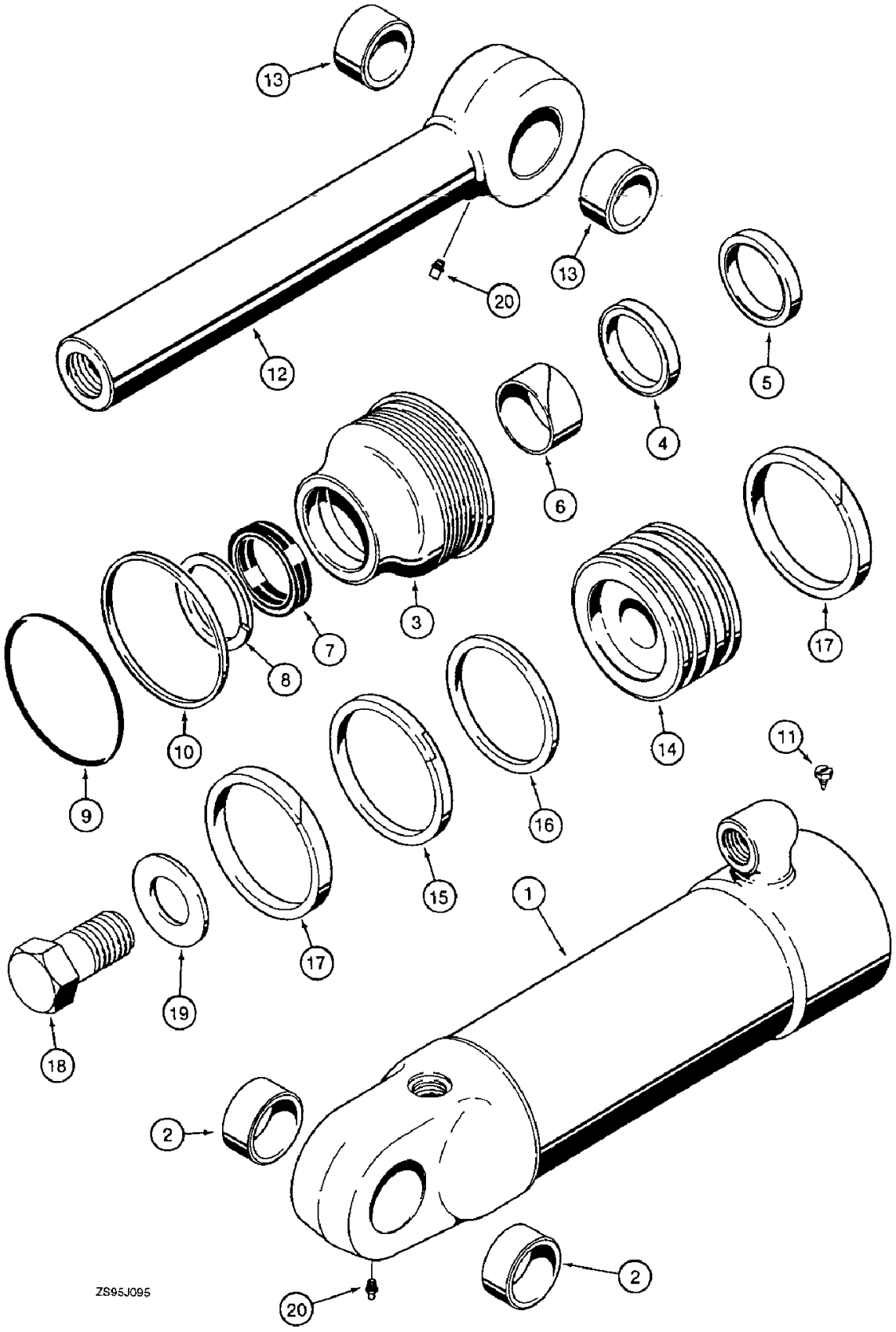


DOZER TILT CYLINDER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		1543256C1		1	SEAL KIT KIT, SEALS, Cylinder repair, Incl Ref 4-9 and 14-16 and an instruction sheet

The cylinder assembly part number is stamped on some cylinder glands or tubes.

DOZER ANGLE CYLINDER



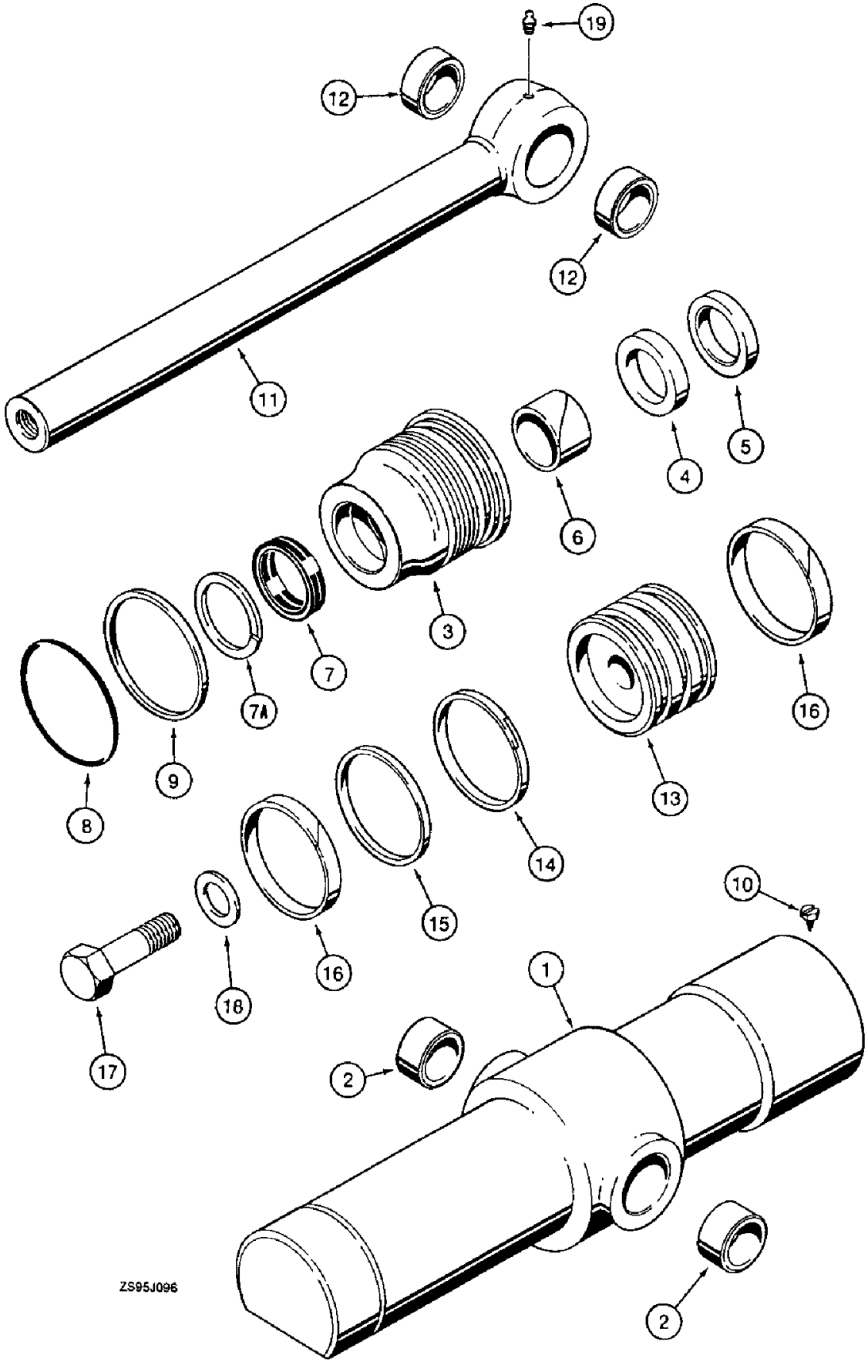
DOZER ANGLE CYLINDER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		140146A1		2	CYLINDER ASSY. CYLINDER ASSEMBLY - 4 (102) ID x 8-5/16 inch (211 mm) stroke, dozer angle
1		140147A1		1	HYD CYL SLEEVE TUBE ASSEMBLY - cylinder
2		D32865		2	BUSHING - tube
3		1543003C1		1	JACK HEAD GLAND - cylinder
4		NSS		1	NOT SERVICED SEPARATELY RETAINER - gland
5	1	D95144		1	WIPER SEAL Wiper - piston rod
6	1	G101533		1	WEAR RING BUSHING - center
7	1	NSS		1	NOT SERVICED SEPARATELY SEAL - U-cup, for service order 1543273C1 seal kit
8	1	G107997		1	SEAL - buffer
9	1	238-5242		1	O-RING -242, 70 Duro, 3.984" ID x .139" Thk
10	1	G32176		1	BACK-UP RING Gland O-Ring
11		276-2446		1	SELF-TAP SCREW Hex Hd, #8 x 3/8" SCREW - self-tapping, hex hd, No. 8 NC x 3/8 ", slotted
12		1980295C1		1	ROD ASSY. ROD ASSEMBLY - piston, 2 inch (51mm) diameter
13		D32865		2	BUSHING - piston rod
14		G100438		1	PISTON - cylinder
15	1	G102285		1	SEAL - piston
16	1	G100440		1	RING - backup, piston seal
17	1	G100448		2	RING - wear
18		28-2044		1	BOLT Hex, 1 1/4"-12 x 2 3/4", G8 - Hex, 1-1/4"-12 NF x 2-3/4", G8
19		G104989		1	WASHER - flat, hardened, special
20		219-1		2	LUBE NIPPLE 1/8"-27 x .66 lg FITTING - grease, straight, 1/8 PT x 21/32 inch, base end of cylinder
		1543273C1		1	SEAL KIT KIT - seal, Includes: Ref. 5-10 and 15-17 and an instruction sheet

(1) Part of Seal Kit P/N 1543273C1

The cylinder assembly part number is stamped on some cylinder glands or tubes.

RIPPER CYLINDER



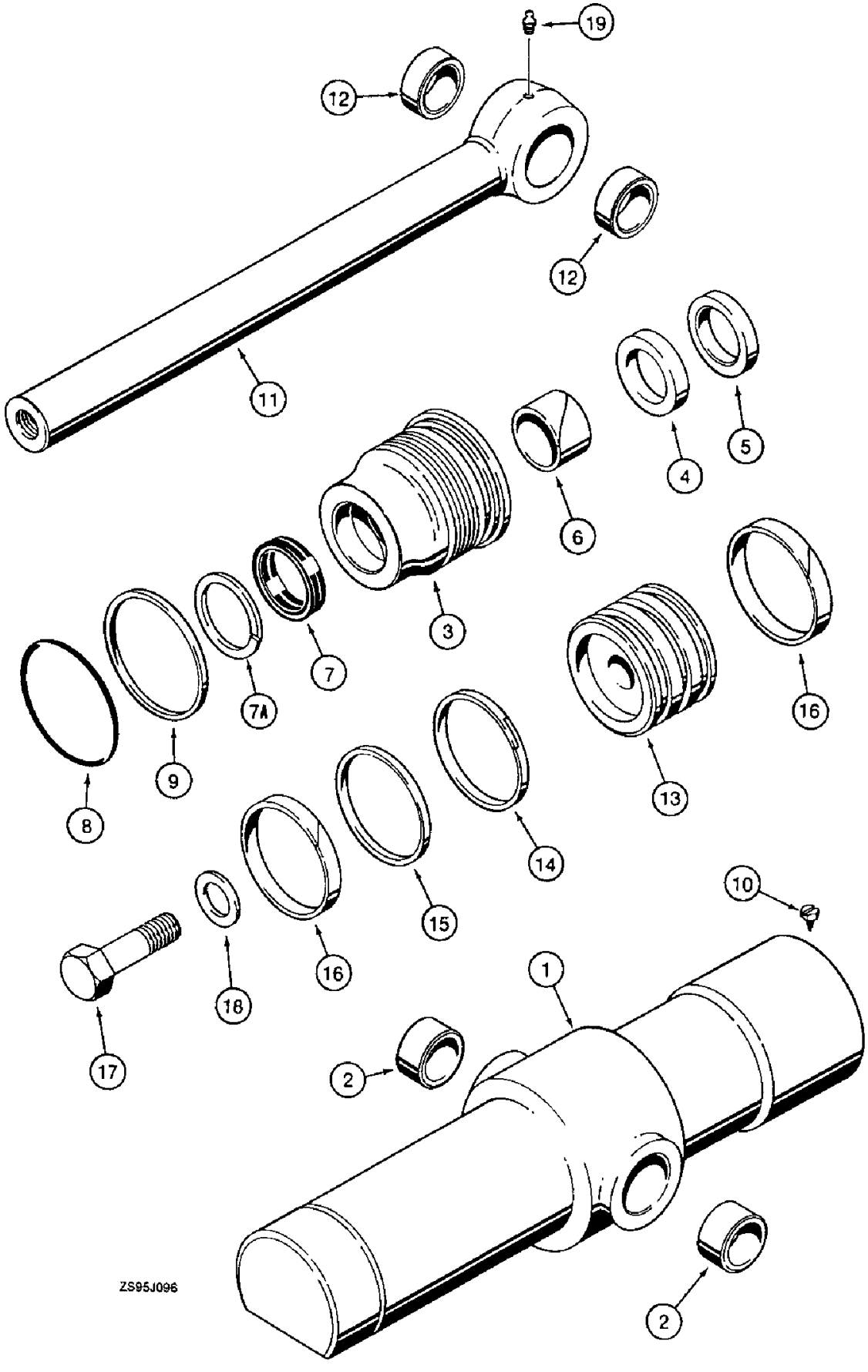
RIPPER CYLINDER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		G101230		1	CYLINDER ASSEMBLY - 3 (76) ID x 10-1/2 inch (267 mm) stroke, ripper
1		D35123		1	TUBE ASSEMBLY - cylinder
2		30634		2	BUSHING - tube
3		1542962C1		1	GLAND ASSEMBLY - cylinder
4		NSS		1	NOT SERVICED SEPARATELY RETAINER - gland
5	1	D95142		1	WIPER SEAL WIPER - piston rod
6	1	G102424		1	BUSHING - Center, Gland
7	1	NSS		1	NOT SERVICED SEPARATELY SEAL - U-cup, piston rod, wide, with O-ring, for service order 1543252C1seal kit
7		G100776		1	SEAL - U-cup, piston rod, service option - severe heat or cold
7A	1	G109093		1	SEAL - piston rod, narrow, piston rod, grooved
8	1	238-5234		1	O-RING -234, 70 Duro, 2.984" ID x .139" Thk Gland -234, 70 Duro, 2.984" ID x .139" Thk
9	1	G32122		1	RING - backup, gland O-ring
10		276-2446		1	SELF-TAP SCREW Hex Hd, #8 x 3/8" SCREW - self-tapping, hex hd, No. 8 NC x 3/8 ", slotted, If used
11		G33467		1	ROD ASSEMBLY - piston, 1-1/2 inch (38 mm) diameter
12		30634		2	BUSHING - piston rod
13		G100442		1	PISTON - cylinder
14	1	G102288		1	SEAL - Piston
15	1	G100444		1	SEALING RING RING - backup, piston seal
16	1	G100449		2	WEAR RING RING - wear
17		25863R1		1	BOLT Hex, 3/4-16 x 2 1/2", G8 - hex, 3/4 NF x 2-1/2 inch, grade 8
18		G32317		1	WASHER - flat, hardened, special
19		219-1		1	LUBE NIPPLE 1/8"-27 x .66 lg FITTING - grease, straight, 1/8 PT x 21/32 inch

(1) Part of Cylinder Seal Kit P/N 1543252C1

The cylinder assembly part number is stamped on some cylinder glands or tubes.

RIPPER CYLINDER

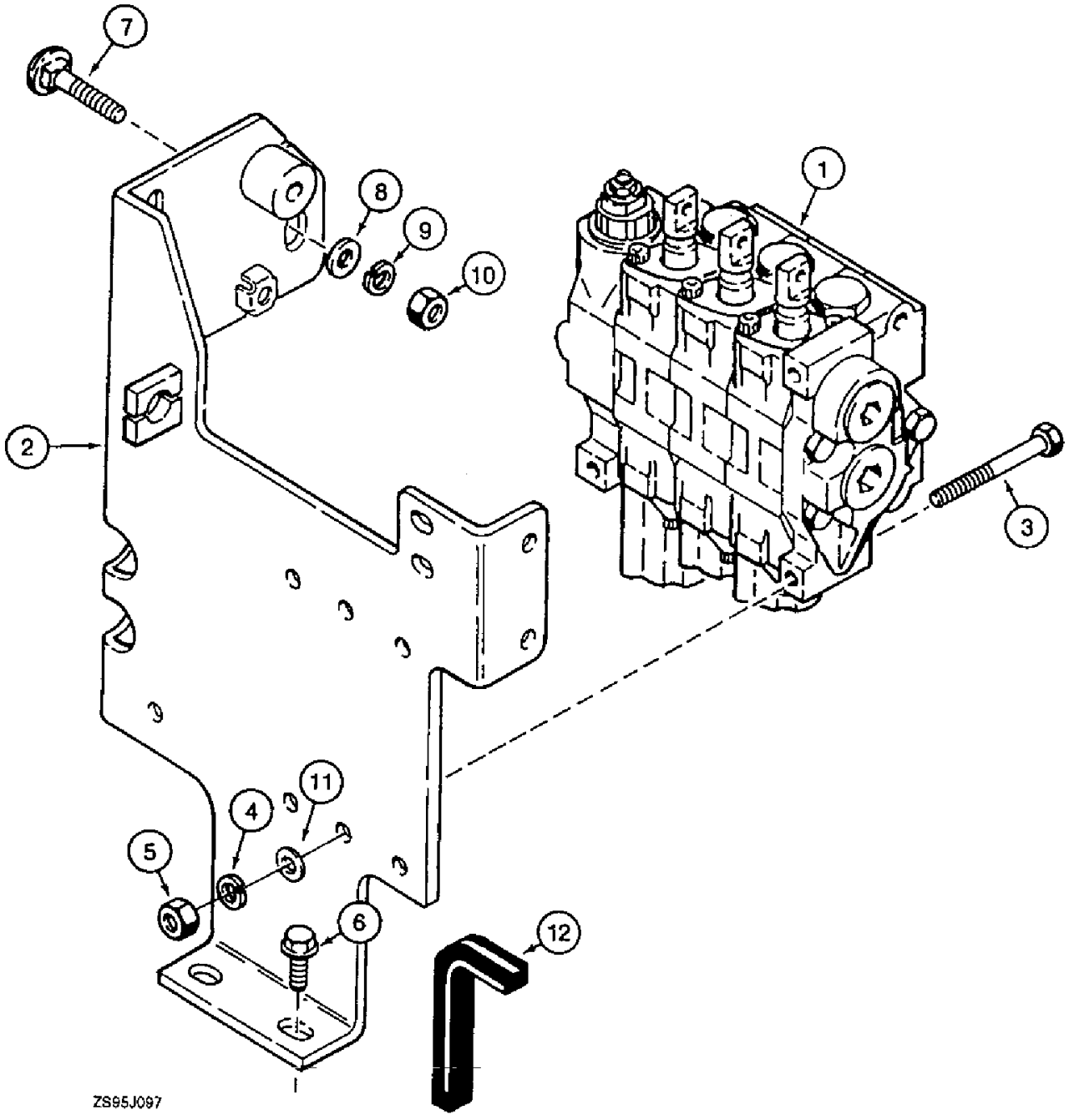


RIPPER CYLINDER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		1543252C1		1	SEAL KIT KIT - seal, cylinder repair, Includes: Ref. 5, 6, 7, 7A-9 and 14-16 and an instruction sheet

The cylinder assembly part number is stamped on some cylinder glands or tubes.

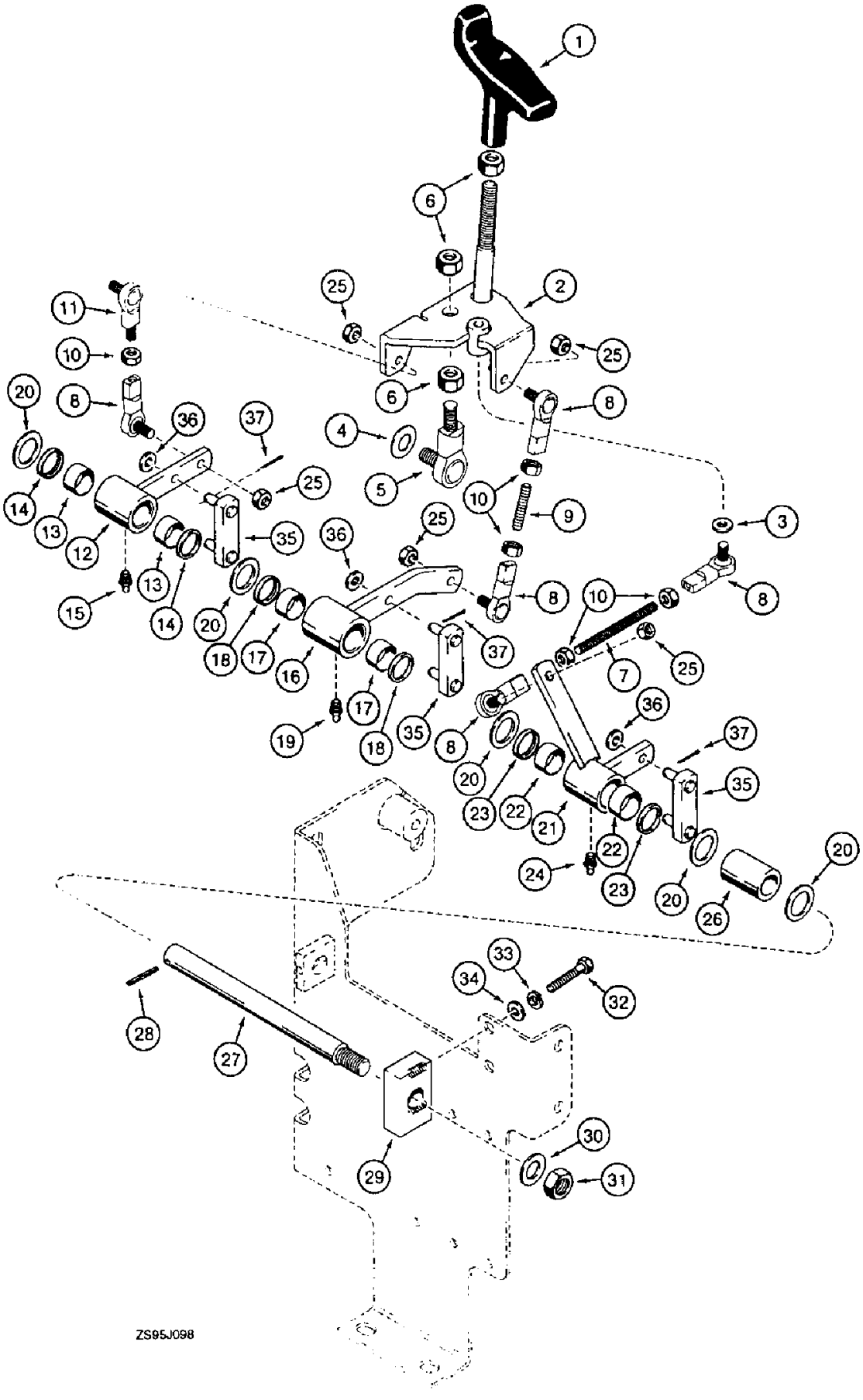
EQUIPMENT CONTROL VALVE AND MOUNTING



EQUIPMENT CONTROL VALVE AND MOUNTING

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		REF		1	INSTRUCTION VALVE ASSEMBLY - equipment control, for correct assembly and components, see figure 8-34 or 8-36
2		R58239		1	BRACKET - control valve mounting
3		413-544		3	BOLT Hex, 5/16"-18 x 2 3/4", G5 - hex, 5/16 NC x 2-3/4 inch
4		492-11031		3	LOCK WASHER 5/16" WASHER, LOCK, 5/16"
5		425-105		3	NUT 5/16"-18, G5
6		160-106		2	BOLT Hex Flg, 1/2"-13 x 1", G8, Full Thd
7		434-820		2	CARRIAGE BOLT Short NK, 1/2"-13 x 1 1/4", G5, Full Thd BOLT - carriage, 1/2 NC x 1-1/4 inch
8		495-21056		2	WASHER 1/2" - flat, 9/16 x 1-3/8 x 7/64 inch
9		80679		2	LOCK WASHER 1/2" WASHER, LOCK, 1/2"
10		425-108		2	NUT 1/2"-13, G5 NUT, , Hex 1/2"-13, G5
11		495-11034		3	WASHER 5/16", SAE 5/16" SAE (flat, 11/32 x 11/16 x 1/16")
12		D55218		1	SEAL, GLASS TRIM - edge, 3 inch (76 mm) long, cut from F42827
		F42827		UAR	RUBBER STRIP TRIM - edge, bulk, 116 inch (2946 mm) long

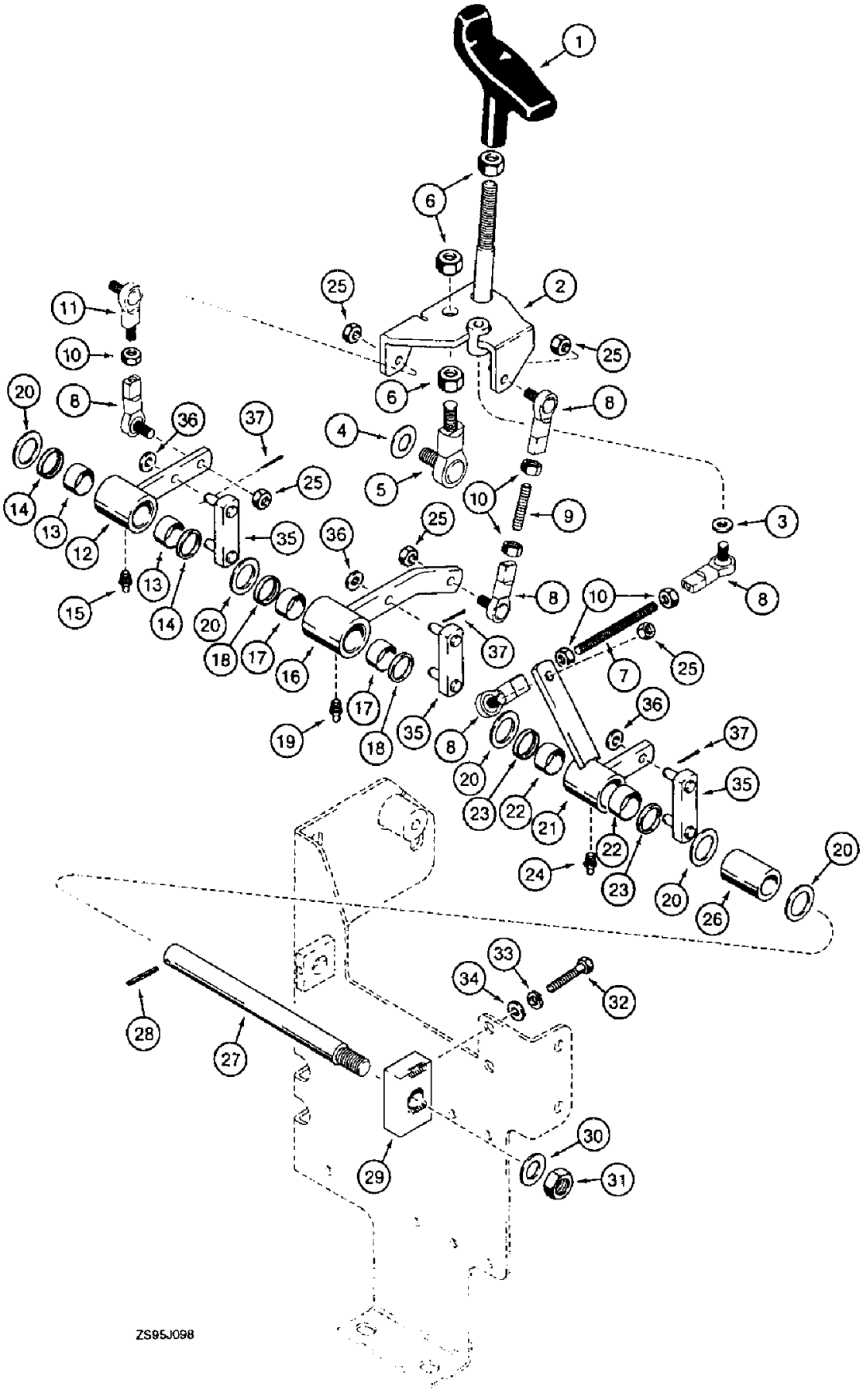
EQUIPMENT CONTROL LEVER AND LINKAGE, ONE CONTROL LEVER - THREE SPOOL VALVE



EQUIPMENT CONTROL LEVER AND LINKAGE, ONE CONTROL LEVER - THREE SPOOL VALVE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		R58220		1	VALVE ASSEMBLY - equipment control, three spool, parts list figure 8-34, for mounting see figure 8-28
1		R58490		1	HANDLE - equipment control, T-grip
2		106400A1		1	HANDLED SHAFT LEVER - equipment control, lift, tilt and angle
3		495-11034		1	WASHER 5/16", SAE 5/16" SAE (flat, 11/32 x 11/16 x 1/16")
4		495-11053		1	WASHER 1/2", SAE (17/32" x 1-1/16" x 3/32") 1/2", SAE
5		A55558		1	BALL JOINT JOINT - ball
6		425-158		3	JAM NUT Jam, 1/2"-20, G5
7		R58258		1	ROD - threaded, 5/16 NF x 3-3/4 inch
8		H289652		5	BALL JOINT - ball, female, 5/16 inch NF
9		R56432		1	ROD,THREADED ROD - threaded, 5/16 NF x 1-1/2 inch
10		425-115		5	NUT 5/16"-24, G5 - hex, 5/16 inch NF
11		R47939		1	ROD JOINT - ball, male, 5/16 inch NF, male
		R58255		1	ROCKER LEVER ASSEMBLY - lift
12		NSS		1	NOT SERVICED SEPARATELY LEVER - lift
13		L31166		2	BEARING - roller
14		65457C1		2	SEAL - oil
15		219-8		1	LUBE NIPPLE 1/4"-28 NPT x .54" lg NIPPLE, LUBE, , straight, taper 1/4"-28 NPT x .54" lg
		R58252		1	ROCKER LEVER ASSEMBLY - tilt
16		NSS		1	NOT SERVICED SEPARATELY LEVER - tilt
17		L31166		2	BEARING - roller
18		65457C1		2	SEAL - oil
19		219-8		1	LUBE NIPPLE 1/4"-28 NPT x .54" lg NIPPLE, LUBE, , straight, taper 1/4"-28 NPT x .54" lg
20		1960614C1		5	WASHER SPACER - nylon
		R58246		1	ROCKER LEVER ASSEMBLY - angle

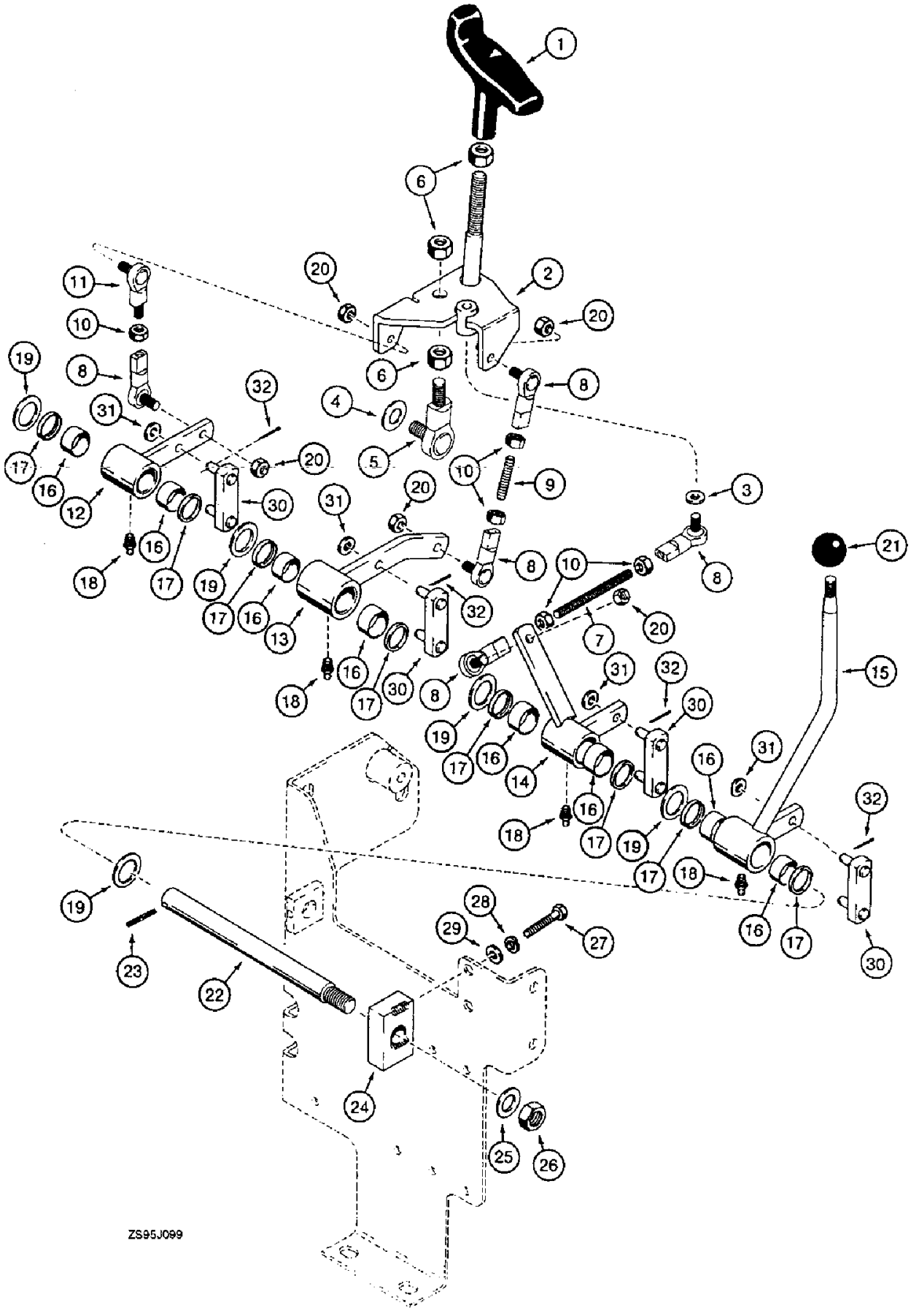
EQUIPMENT CONTROL LEVER AND LINKAGE, ONE CONTROL LEVER - THREE SPOOL VALVE



EQUIPMENT CONTROL LEVER AND LINKAGE, ONE CONTROL LEVER - THREE SPOOL VALVE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
21		NSS		1	NOT SERVICED SEPARATELY LEVER - angle
22		L31166		2	BEARING - roller
23		65457C1		2	SEAL - oil
24		219-8		1	LUBE NIPPLE 1/4"-28 NPT x .54" lg NIPPLE, LUBE, , straight, taper 1/4"-28 NPT x .54" lg
25		232-4605		5	LOCK NUT 5/16"-24, GC NUT, LOCK, 5/16"-24, GC
26		R58344		1	SPACER -
27		R58256		1	SHAFT - control linkage
28		438-31224		1	PIN 3/16" x 1 1/2", Coiled
29		R58257		1	BLOCK - shaft mounting
30		495-11066		1	WASHER 5/8", SAE - flat, 21/32 x 1-5/16 x 3/32 inch
31		231-24410		1	LOCK NUT 5/8"-18, GB NUT - hex, self-locking, 5/8 inch NF
32		413-612		2	BOLT Hex, 3/8"-16 x 3/4", G5, Full Thd
33		492-11038		2	LOCK WASHER 3/8"
34		495-11041		2	WASHER 3/8", SAE (Flat, 13/32 x 13/16 x 1/16") 3/8", SAE
35		139345A1		3	POWER ARM LINK - control valve
36		495-11034		6	WASHER 5/16", SAE 5/16" SAE (flat, 11/32 x 11/16 x 1/16")
37		432-612		6	COTTER PIN 3/32" x 3/4" PIN , SPLIT (COTTER), 3/32" x 3/4"

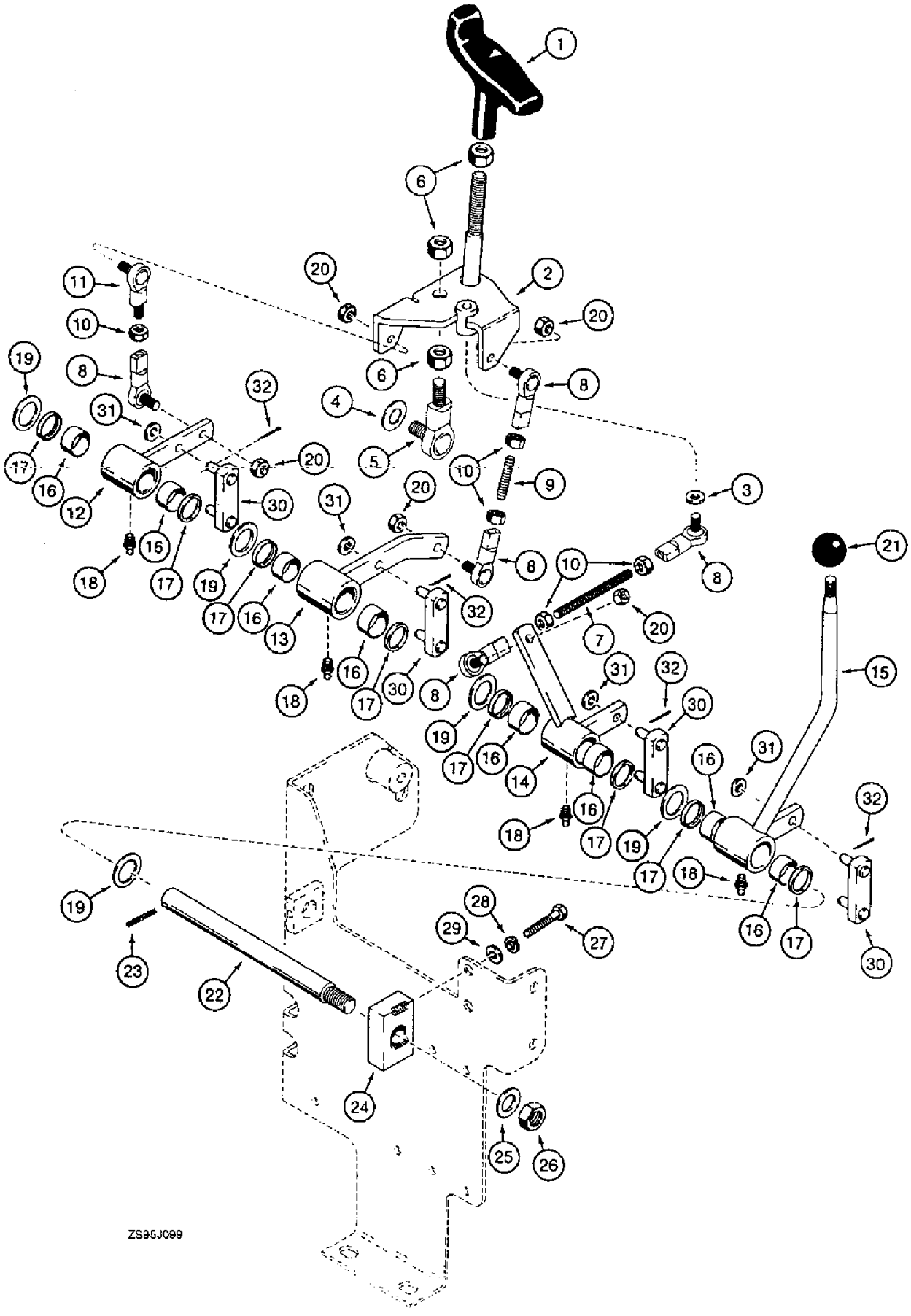
EQUIPMENT CONTROL LEVERS AND LINKAGE, TWO CONTROL LEVERS - FOUR SPOOL VALVE



EQUIPMENT CONTROL LEVERS AND LINKAGE, TWO CONTROL LEVERS - FOUR SPOOL VALVE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		R58221		1	VALVE ASSEMBLY - equipment control, four spool, parts list figure 8-36, for mounting see figure 8-28
1		R58490		1	HANDLE - equipment control, T-grip
2		106400A1		1	HANDLED SHAFT LEVER - equipment control
3		495-11034		1	WASHER 5/16", SAE 5/16" SAE (flat, 11/32 x 11/16 x 1/16")
4		495-11053		1	WASHER 1/2", SAE (17/32" x 1-1/16" x 3/32") 1/2", SAE
5		A55558		1	BALL JOINT JOINT - ball
6		425-158		3	JAM NUT Jam, 1/2"-20, G5
7		R58258		1	ROD - threaded, 5/16 NF x 3-3/4 inch
8		H289652		5	BALL JOINT - ball, female, 5/16 inch NF
9		R56432		1	ROD,THREADED ROD - threaded, 5/16 NF x 1-1/2 inch
10		425-115		5	NUT 5/16"-24, G5 - hex, 5/16 inch NF
11		R47939		1	ROD JOINT - ball, male, 5/16 inch NF, male
12		R58255		1	ROCKER LEVER ASSEMBLY - lift, spool to shaft, also includes items 16, 17, and 18
13		R58252		1	ROCKER LEVER ASSEMBLY - tilt, spool to shaft, also includes items 16, 17, and 18
14		R58246		1	ROCKER LEVER ASSEMBLY - angle, spool to shaft, also includes items 16, 17, and 18
15		R58249		1	LEVER ASSEMBLY - auxiliary control
16		L31166		2	BEARING - roller
17		65457C1		2	SEAL - oil
18		219-8		1	LUBE NIPPLE 1/4"-28 NPT x .54" lg NIPPLE, LUBE, , straight, taper 1/4"-28 NPT x .54" lg
19		R58209		5	SPACER - nylon
20		232-4605		5	LOCK NUT 5/16"-24, GC NUT, LOCK, 5/16"-24, GC

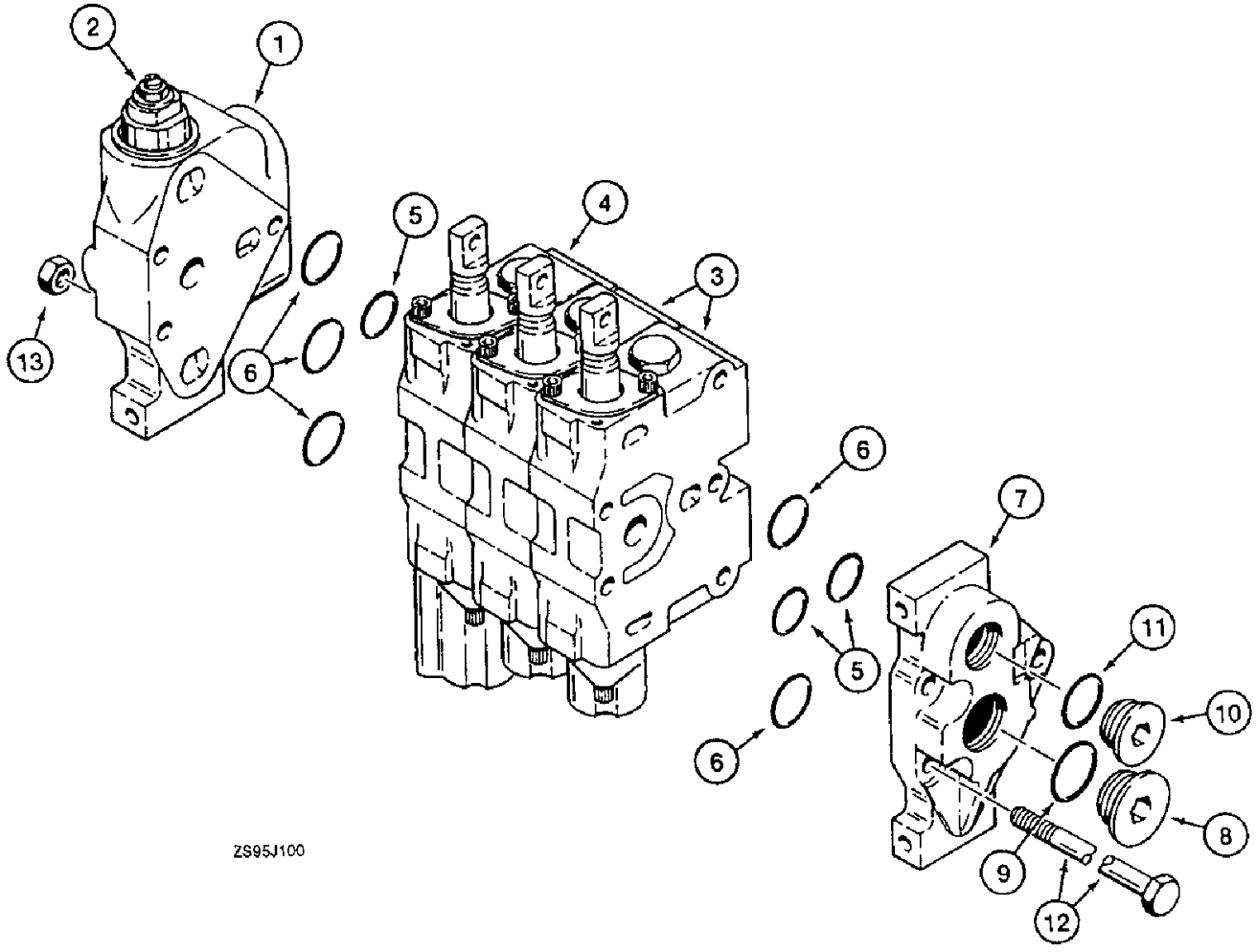
EQUIPMENT CONTROL LEVERS AND LINKAGE, TWO CONTROL LEVERS - FOUR SPOOL VALVE



EQUIPMENT CONTROL LEVERS AND LINKAGE, TWO CONTROL LEVERS - FOUR SPOOL VALVE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
21		70213		1	KNOB - control lever
22		R58256		1	SHAFT - control linkage
23		438-31224		1	PIN 3/16" x 1 1/2", Coiled
24		R58257		1	BLOCK - shaft mounting
25		495-11066		1	WASHER 5/8", SAE - flat, 21/32 x 1-5/16 x 3/32 inch
26		231-24410		1	LOCK NUT 5/8"-18, GB NUT - hex, self-locking, 5/8 inch NF
27		413-612		2	BOLT Hex, 3/8"-16 x 3/4", G5, Full Thd
28		492-11038		2	LOCK WASHER 3/8"
29		495-11041		2	WASHER 3/8", SAE (Flat, 13/32 x 13/16 x 1/16") 3/8", SAE
30		139345A1		4	POWER ARM LINK - control valve
31		495-11034		8	WASHER 5/16", SAE 5/16" SAE (flat, 11/32 x 11/16 x 1/16")
32		432-612		8	COTTER PIN 3/32" x 3/4" PIN , SPLIT (COTTER), 3/32" x 3/4"

THREE SPOOL CONTROL VALVE

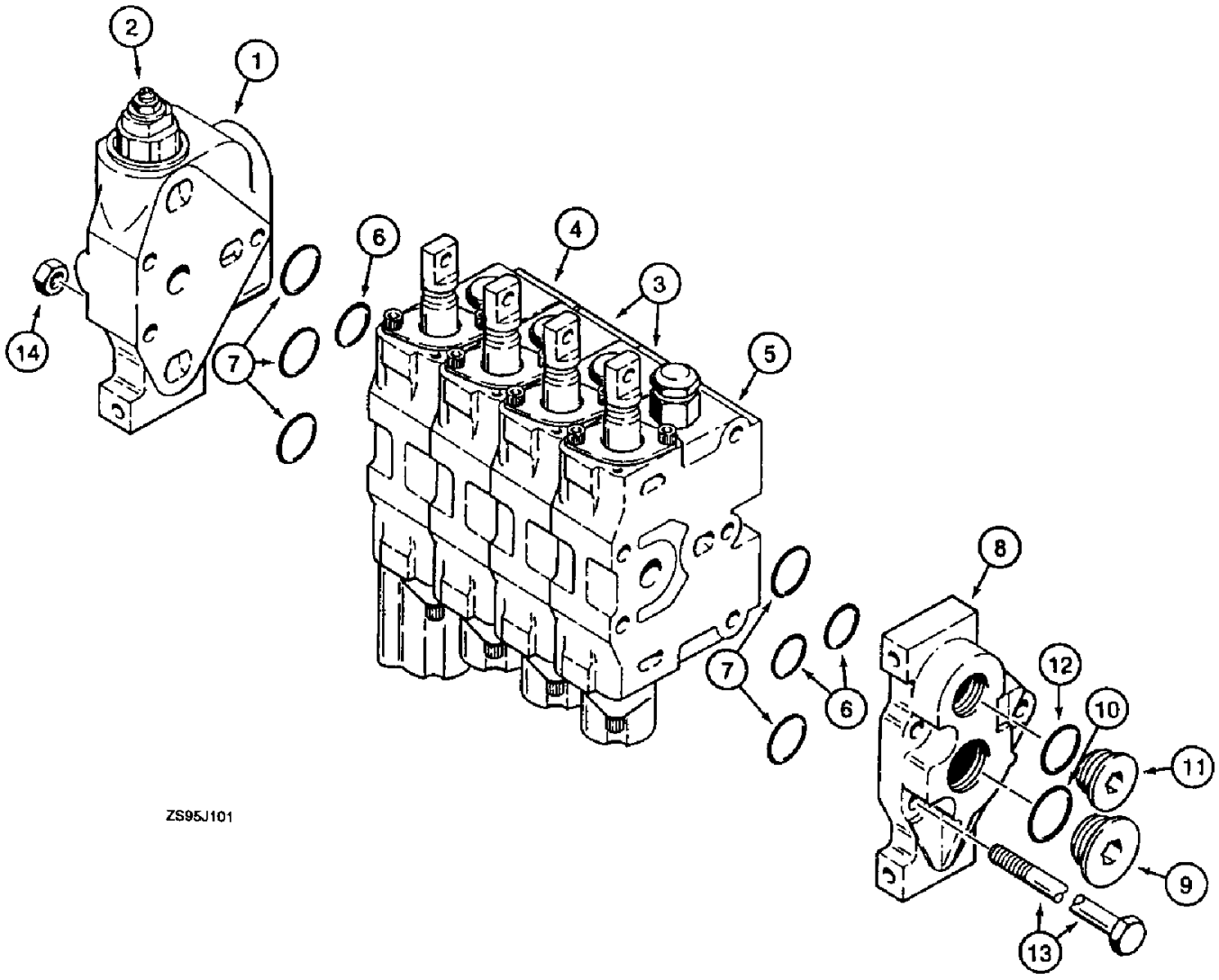


THREE SPOOL CONTROL VALVE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		R58220		1	VALVE ASSEMBLY - equipment control, three spool
1		N8942		1	VALVE BLOCK SECTION - inlet-outlet
2	1	N8191		1	VALVE ASSEMBLY - main relief, parts list figure 8-38
3		100802A1		2	KNIFE SECTION SECTION ASSEMBLY - dozer tilt and angle, parts list figure 8-42
4		100801A1		1	KNIFE SECTION SECTION ASSEMBLY - dozer lift, parts list figure 8-40
5		238-6117		5	O-RING -117, 90 Duro, .799" ID x .103" Thk Between sections -117, 90 Duro, .799" ID x .103" Thk
6		238-5119		11	O-RING -119, 70 Duro, .924" ID x .103" Thk Between sections -119, 70 Duro, .924" ID x .103" Thk
7		100825A1		1	COVER ASSEMBLY - end
8		218-5213		1	PLUG Hex Soc, 1 3/16"-12 ORB - hex socket, 1-3/16-12 inch O-ring boss
9		237-6014		1	O-RING 0.489" ID x 0.629" OD x 0.07" 14-1, 90 Duro, 1.048" ID x .116" Thk
10		9841223		1	PLUG Hex Soc, 1 1/16"-12 ORB
11		237-6012		1	O-RING 0.924" x 0.116" 12-1, 90 Duro, .924 ID x .116" Thk
12		413-6128		3	BOLT Hex, 3/8"-16 x 8", G5 - hex, 3/8 NC x 8 inch
13		425-106		3	NUT 3/8"-16, G5

(1) The pressure setting of this main relief valve may not be preset for your application, consult the 550E Service

FOUR SPOOL CONTROL VALVE

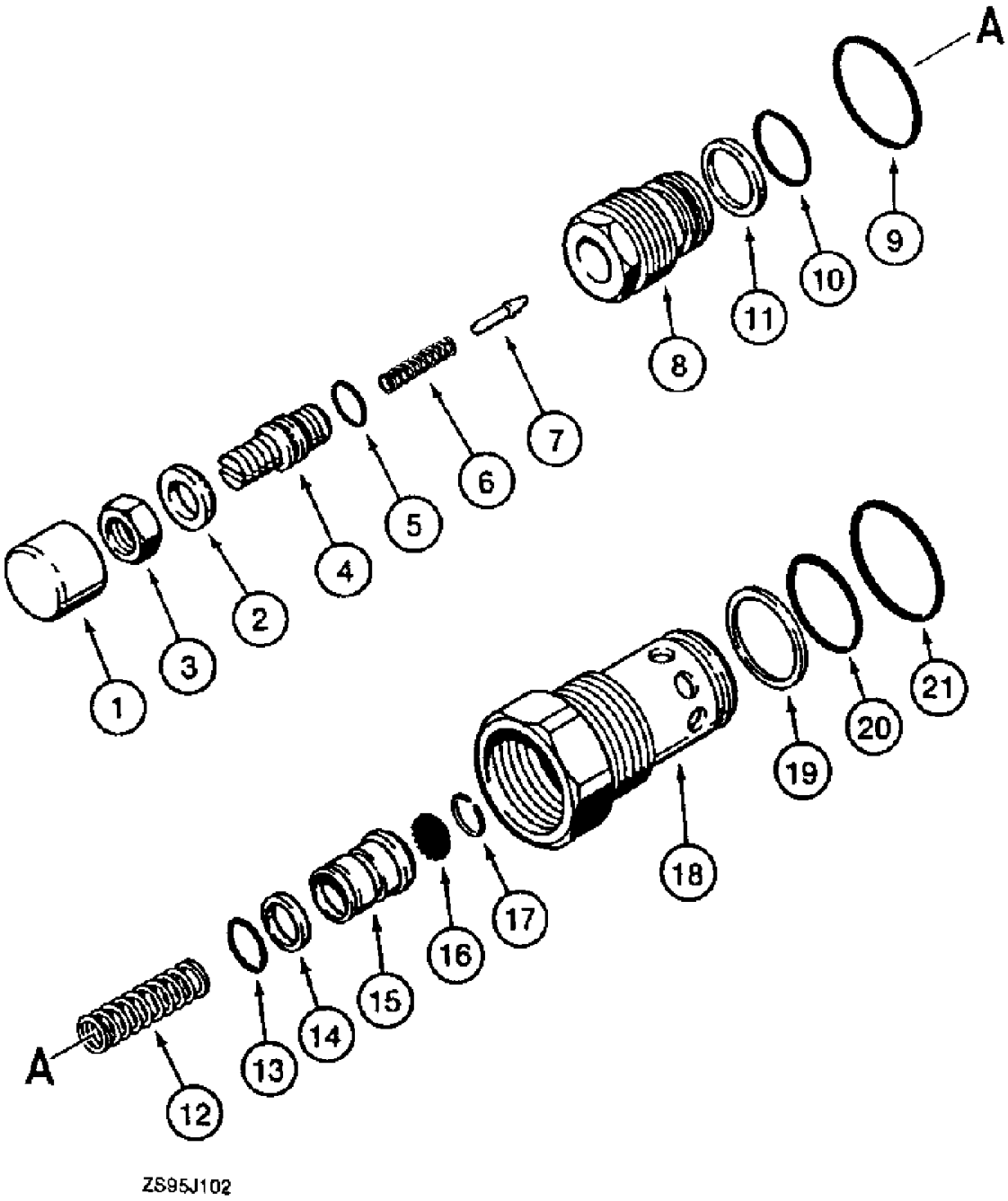


FOUR SPOOL CONTROL VALVE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		R58221		1	VALVE ASSEMBLY - equipment control, four spool
1		N8942		1	VALVE BLOCK SECTION - inlet-outlet
2	1	N8191		1	VALVE ASSEMBLY - main relief, parts list figure 8-38
3		100802A1		2	KNIFE SECTION SECTION ASSEMBLY - dozer tilt and angle, parts list figure 8-42
4		100801A1		1	KNIFE SECTION SECTION ASSEMBLY - dozer lift, parts list figure 8-40
5		100803A1		1	KNIFE SECTION SECTION ASSEMBLY - ripper, parts list figure 8-42
6		238-6117		6	O-RING -117, 90 Duro, .799" ID x .103" Thk Between sections -117, 90 Duro, .799" ID x .103" Thk
7		238-5119		14	O-RING -119, 70 Duro, .924" ID x .103" Thk Between sections -119, 70 Duro, .924" ID x .103" Thk
8		100825A1		1	COVER ASSEMBLY - end
9		218-5213		1	PLUG Hex Soc, 1 3/16"-12 ORB - hex socket, 1-3/16-12 inch O-ring boss
10		237-6014		1	O-RING 0.489" ID x 0.629" OD x 0.07" 14-1, 90 Duro, 1.048" ID x .116" Thk
11		9841223		1	PLUG Hex Soc, 1 1/16"-12 ORB
12		237-6012		1	O-RING 0.924" x 0.116" 12-1, 90 Duro, .924 ID x .116" Thk
13		413-6152		3	BOLT Hex, 3/8"-16 x 9 1/2", G5 - hex, 3/8 NC x 9-1/2 inch
14		425-106		3	NUT 3/8"-16, G5

(1) The pressure setting of this main relief valve may not be preset for your application, consult the 550E Service

MAIN RELIEF VALVE



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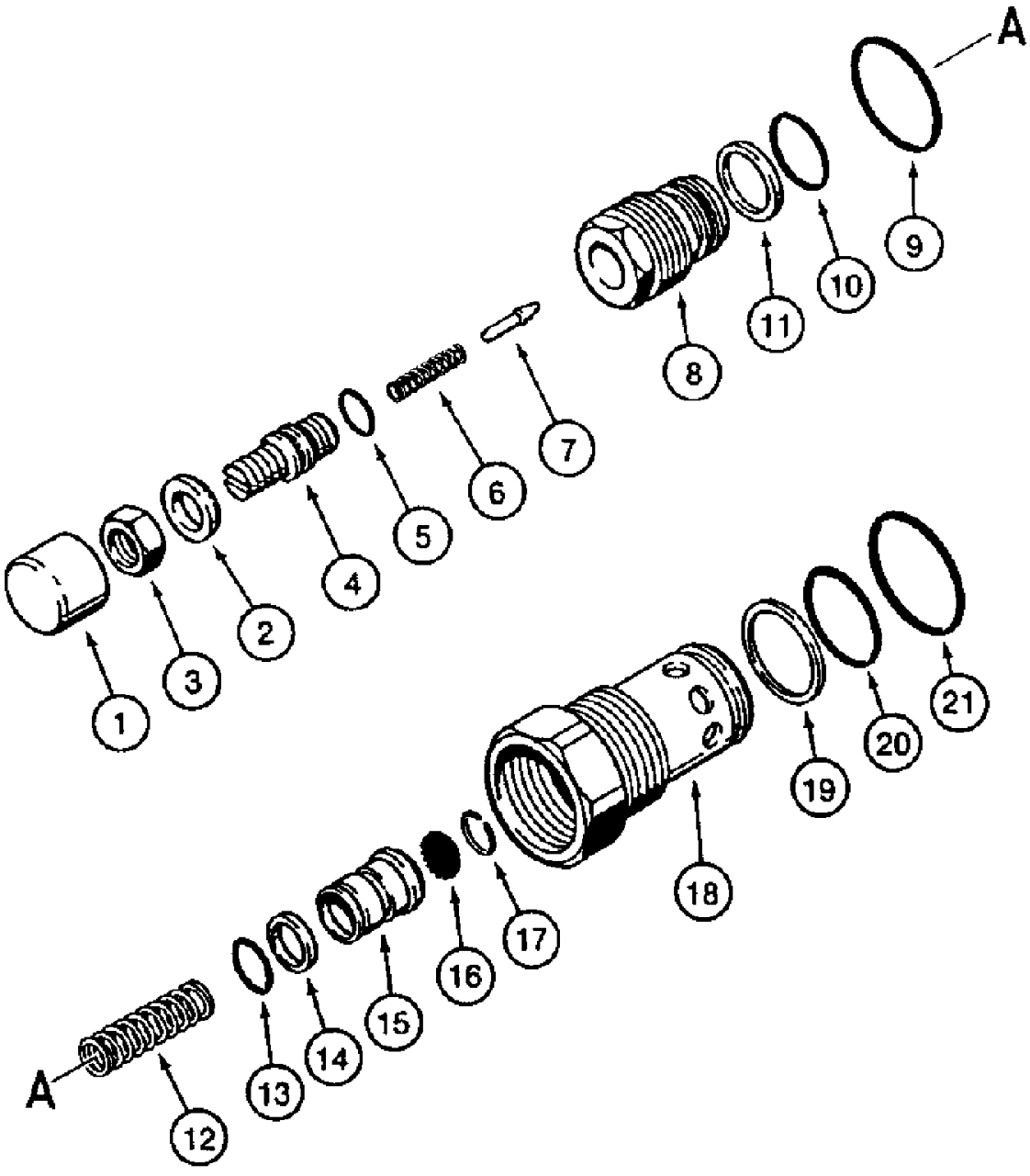
MAIN RELIEF VALVE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
	1	N8191		1	VALVE ASSEMBLY - main relief
1		NSS		1	NOT SERVICED SEPARATELY COVER - tamper proof
2		N9475		1	WASHER - special
3		86585245		1	NUT Jam, 3/8"-24, G5 - hex, jam, 3/8 inch NF
4		N9463		1	SCREW - adjusting
5		238-5012		1	O-RING 0.364" ID x 0.504" OD x 0.07" -012, 70 Duro, .364" ID x .070" Thk, Adjusting screw
6		N9465		1	SPRING - plunger
7		N9464		1	PLUNGER POPPET - relief valve
8		N9769		1	BODY - pilot plunger
9		238-5019		1	O-RING 0.801" ID x 0.941" OD x 0.07" -019, 70 Duro, .801" ID x .070" Thk
10		A55911		1	O-RING 0.807" ID - small
11		N9768		1	BACK-UP RING 0.831mm ID x 0.939mm OD x 0.052mm RING - backup, small O-ring
12		S300250		1	SPRING - poppet
13		238-7113		1	O-RING -113, Cl 7, .549" ID x .103" Thk
14		S84196		1	RING 9/16" ID x 3/4" OD x 0.052" - backup, poppet O-ring
15		S300249		1	VALVE POPPET POPPET - relief valve
16		S300248		1	VALVE POPPET SCREEN - poppet
17		N9473		1	RING, SNAP RING - retaining, screen
18		NSS		1	NOT SERVICED SEPARATELY BODY - relief valve
19		N8197		1	BACK-UP RING 1.006" ID x 1.116" OD x 0.055" RING - backup, small O-ring, valve body
20		238-6022		1	O-RING -022, 90 Duro, .989" ID x .070" Thk Valve body -022, 90 Duro, .989" ID x .070" Thk

(1) The pressure setting of this main relief valve may not be preset for your application, consult the 550E Service

MAIN RELIEF VALVE

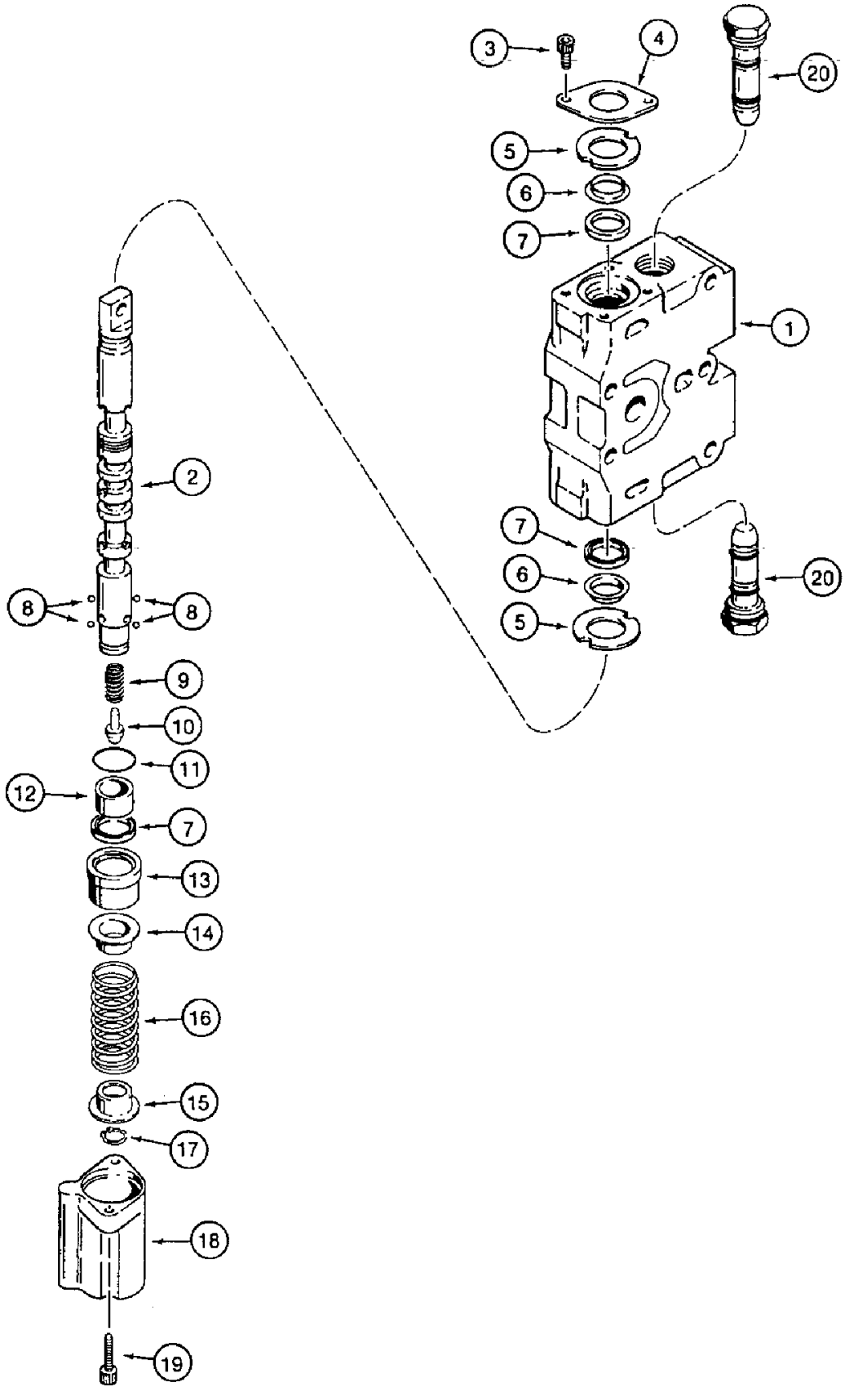


ZS95J102

MAIN RELIEF VALVE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
21		238-6023		1	O-RING -023, 90 Duro, 1.051" ID x .070" Thk Valve body -023, 90 Duro, 1.051" ID x .070" Thk

LIFT SECTION

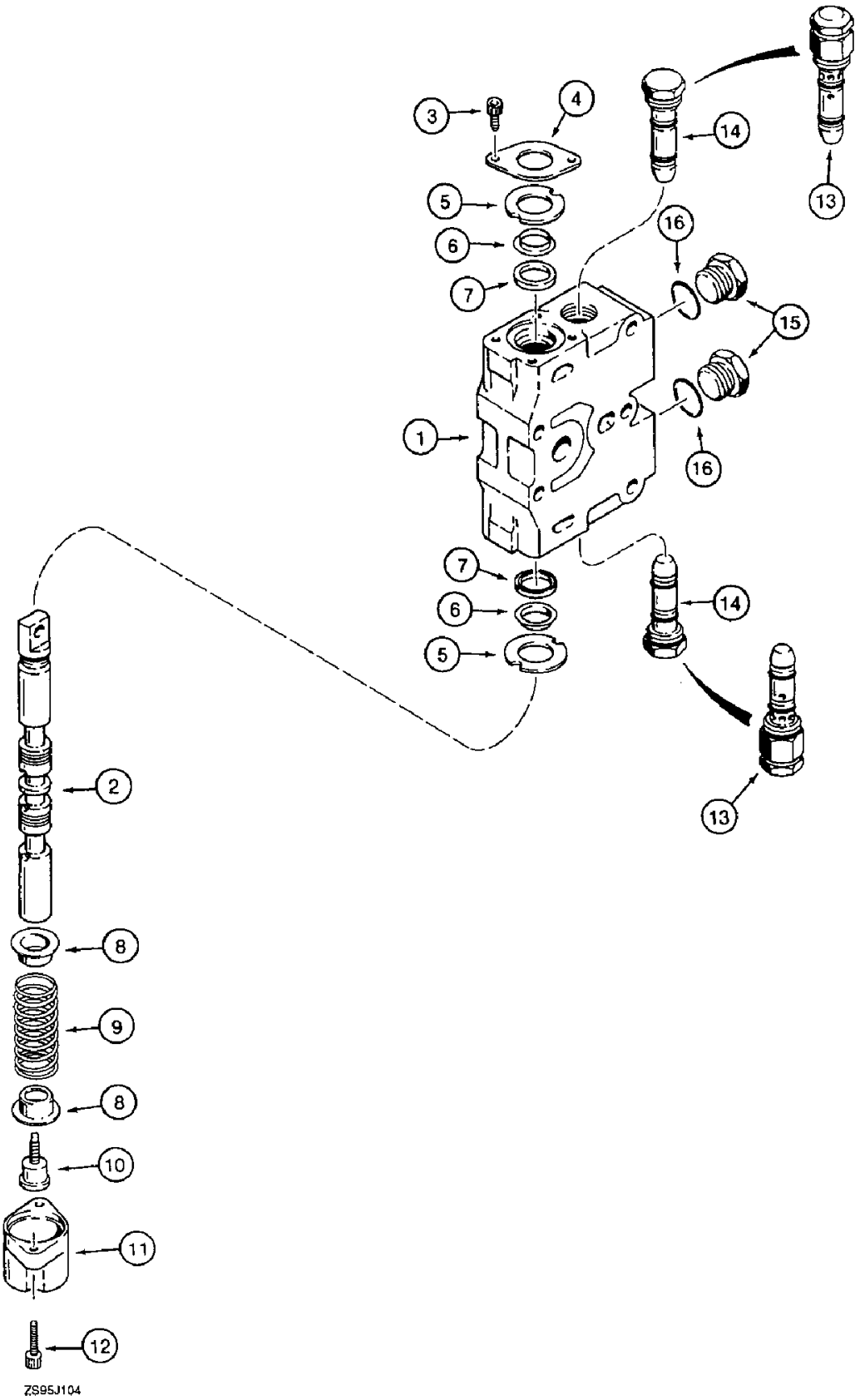


LIFT SECTION

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		100801A1		1	KNIFE SECTION SECTION ASSEMBLY - lift
1		NSS		1	NOT SERVICED SEPARATELY HOUSING - section
2		NSS		1	NOT SERVICED SEPARATELY SPOOL - section
3		61-3258		2	HEX SOC SCREW Hex Soc Hd, 1/4"-20 x 1/2" BOLT - hex socket, 1/4 NC x 1/2 inch
4		N8194		1	LARGE PLATE PLATE - retainer
5	1	136898A1		2	RETAINER - spool seals
6		136900A1		2	WIPER SEAL WIPER - spool
7		136902A1		2	SEAL - lip
8		S301095		4	BALL - steel, 7/32 inch diameter
9		100848A1		1	SPRING - detent
10		N7035		1	VALVE POPPET POPPET - detent
11		238-5121		1	O-RING -121, 70 Duro, 1.049" ID x .103" Thk
12		S301097		1	SLEEVE VALVE SLEEVE - spool
13		100847A1		1	SLEEVE - detent
14		100845A1		1	COLLAR SEAT - spring, upper
15		N7033		1	SEAT - spring, lower
16		100846A1		1	SPRING - centering, spool
17		100-1162		1	SNAP RING #62, Ext Ring, Snap, , spool #62, Ext
18		136896A1		1	CAP - spool detent
19		102201A1		2	HEX SOC SCREW Hex Soc Hd, 1/4"-20 x 7/8" SCREW, , Special, self-locking, Use Loctite 242 Hex Soc Hd, 1/4"-20 x 7/8"
20		D87307		2	VALVE ASSEMBLY - load check, parts list figure 8-44
21		100850A1		1	SEAL - lip, dentent sleeve, not shown

(1) REF 5, 6, 7: 136898A1, 136900A1, 136902A1 - RETROFIT KIT TO GO BACK TO ORING SEAL/BACK-UP RING IS

TILT, ANGLE, AND AUXILIARY SECTIONS

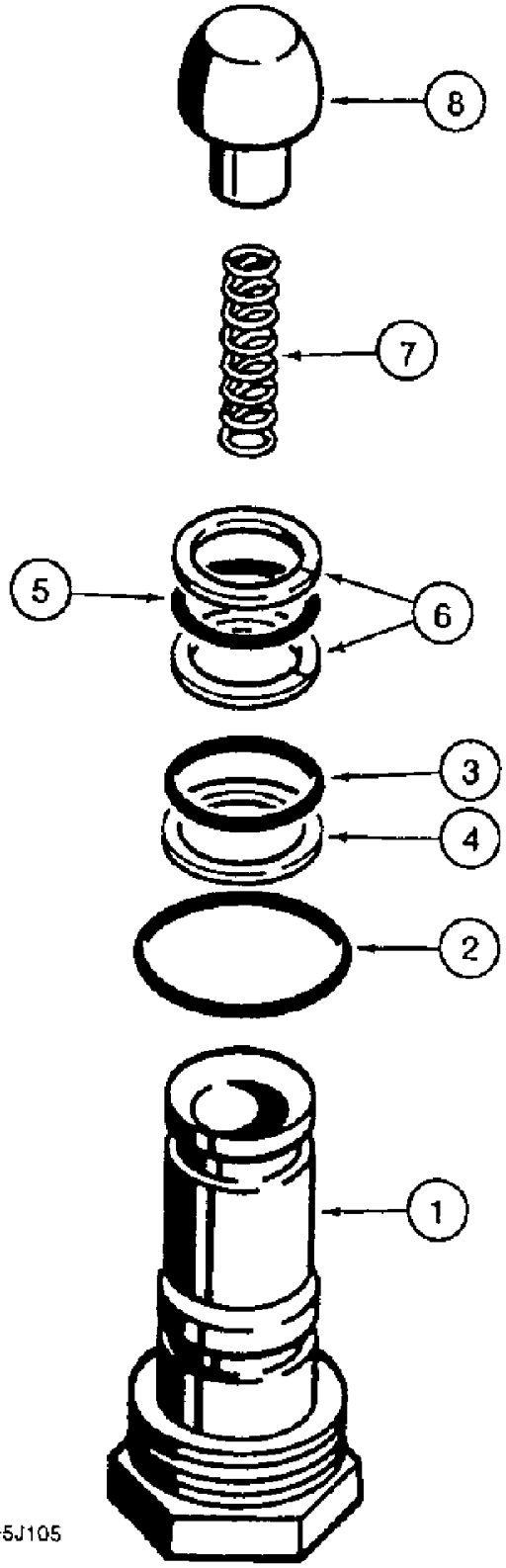


TILT, ANGLE, AND AUXILIARY SECTIONS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		100803A1		1	KNIFE SECTION SECTION ASSEMBLY - ripper
		100802A1		2	KNIFE SECTION SECTION ASSEMBLY - dozer blade tilt and angle
1		NSS		1	NOT SERVICED SEPARATELY HOUSING - section
2		NSS		1	NOT SERVICED SEPARATELY SPOOL - section
3		61-3258		2	HEX SOC SCREW Hex Soc Hd, 1/4"-20 x 1/2" BOLT - hex socket, 1/4 NC x 1/2 inch
4		N8194		1	LARGE PLATE PLATE - retainer
5	1	136898A1		2	RETAINER - spool seals
6		136900A1		2	WIPER SEAL WIPER - spool
7		136902A1		2	SEAL - lip, spool
8		H267591		2	SPRING SEAT SEAT - spring
9		100854A1		1	SPRING - centering
10		N14593		1	STEP BOLT BOLT - special, retainer, use Loctite 242
11		S301092		1	FLANGE COVER CAP CAP - spool, lower
12		102201A1		2	HEX SOC SCREW Hex Soc Hd, 1/4"-20 x 7/8" SCREW, , Special, self-locking Hex Soc Hd, 1/4"-20 x 7/8"
13		N8950		2	VALVE ASSEMBLY - circuit relief, ripper section, parts list figure 8-46
14		D87307		2	VALVE ASSEMBLY - load check, dozer tilt and angle sections, parts list figure 8-44
15		86512512		2	PLUG Hex Hd, 7/8"-14 ORB - hex, 7/8-14 inch O-ring boss, O-ring boss, 4 spool to 3 spool, if used
16		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk

(1) REF 5, 6, 7: 136898A1, 136900A1, 136902A1 - RETROFIT KIT TO GO BACK TO ORING SEAL/BACK-UP RING IS

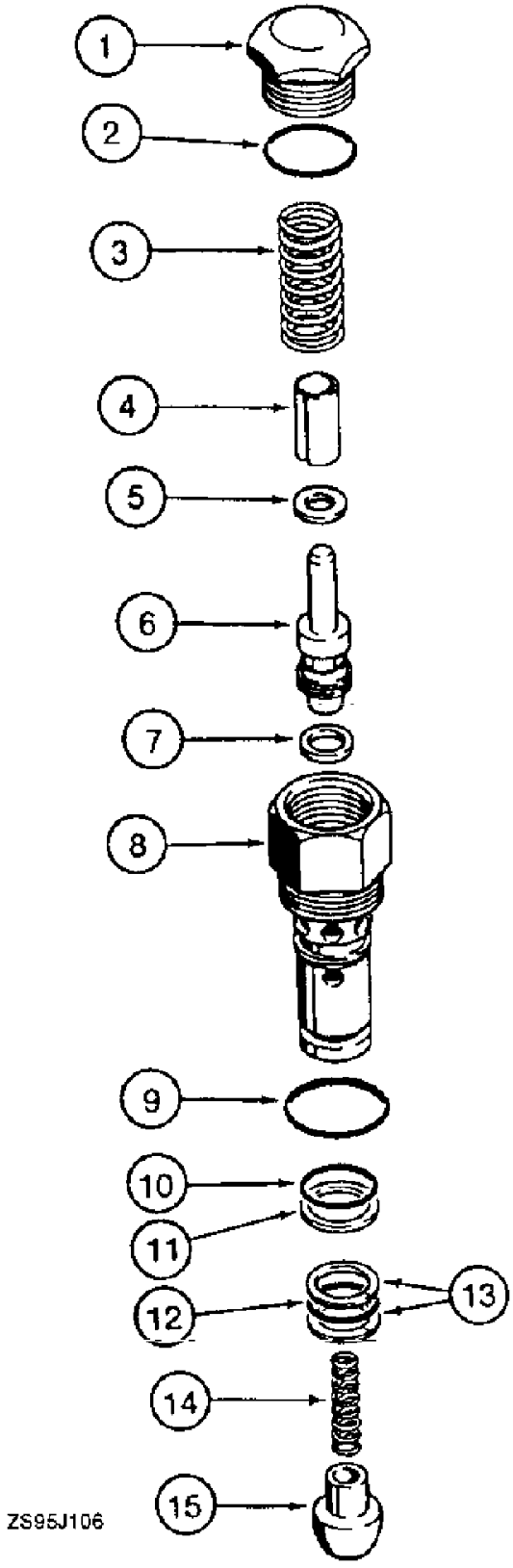
LOAD CHECK VALVE



LOAD CHECK VALVE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		D87307		6	VALVE ASSEMBLY - load check
1		NSS		1	NOT SERVICED SEPARATELY BODY - load check valve
2		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
3		238-6016		1	O-RING -016, 90 Duro, .614" ID x .070" Thk Center -016, 90 Duro, .614" ID x .070" Thk
4		L35297		1	RING - backup center O-ring
5		238-5015		1	O-RING 0.551" ID x 0.691" OD x 0.07" -015, 70 Duro, .551" ID x .070" Thk, Inner
6		D88725		2	BACK-UP RING RING - backup, inner O-ring
7		H268730		1	SPRING - poppet
8		D28576		1	VALVE POPPET POPPET - load check valve

CIRCUIT RELIEF VALVE



CIRCUIT RELIEF VALVE

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		N8950		2	VALVE ASSEMBLY - circuit relief
1		NSS		1	NOT SERVICED SEPARATELY CAP - circuit relief valve
2		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
3		N8196		1	SPRING - outer
4		N8190		1	SLEEVE VALVE SLEEVE - outer spring
5		A55893		UAR	SHIM .0418" Thk (1.016 mm) .0418" Thk
5		A55894		UAR	SHIM .0209" Thk (0.508 mm) .0209" Thk
5		D39712		UAR	SHIM - 0.010 inch (0.254 mm) thick
		18-1417		1	SEAL PLUNGER ASSEMBLY - circuit relief valve
6		NSS		1	NOT SERVICED SEPARATELY PLUNGER - circuit relief valve
7		D39714		1	RING SEAL - plunger, double lip
8		NSS		1	NOT SERVICED SEPARATELY BODY - circuit relief valve
9		237-6010		1	O-RING 0.239" ID x 0.379" OD x 0.07" 10-1, 90 Duro, .755" ID x .097" Thk
10		238-6016		1	O-RING -016, 90 Duro, .614" ID x .070" Thk Center -016, 90 Duro, .614" ID x .070" Thk
11		L35297		1	RING - backup, center O-ring
12		238-5015		1	O-RING 0.551" ID x 0.691" OD x 0.07" -015, 70 Duro, .551" ID x .070" Thk, Inner
13		D88725		2	BACK-UP RING RING - backup, inner O-ring
14		H268730		1	SPRING - poppet, inner
15		D28576		1	VALVE POPPET POPPET - load check

SECTION INDEX

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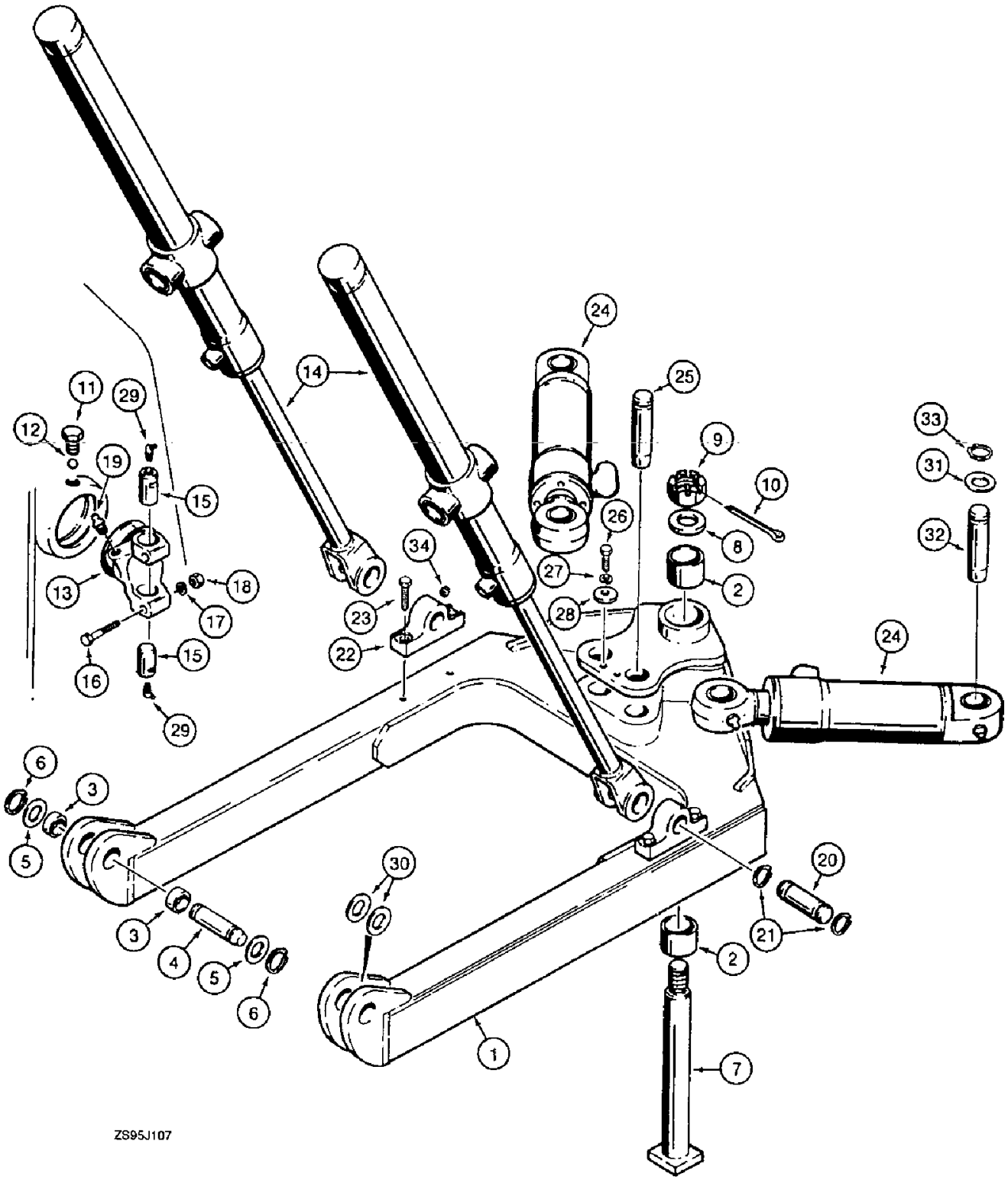
DOZER C-FRAME AND CYLINDERS



DOZER C-FRAME AND CYLINDERS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R57259		1	FRAME C-FRAME ASSEMBLY - dozer
2		D33023		2	BUSHING - leveling beam mounting
3		D32919		4	BUSHING - mounting lug
4		R50774		2	SPLIT PIN/SAFETY PIN PIN - C-frame mounting
5		D28610		4	WASHER - flat, 1/2 inch, special, pin retaining
6		100-16150		4	SNAP RING #150, Ext Ring, Snap, , Pin #150, Ext
7		D34789		1	AXLE PIN PIN - leveling
8		495-21162		1	WASHER 1 1/2" - flat, 1-5/8 x 3-1/2 x 3/16 inch
9		425-1224		1	SLOTTED NUT 1 1/2"-6, G5 NUT - hex, slotted, 1-1/2 inch NC
10		432-1640		1	COTTER PIN 1/4" x 2 1/2" Pin, Split (Cotter), 1/4" x 2 1/2"
11		D28481		2	PLUG - special
12		211-1024		38	BALL 3/4" Dia - chrome alloy steel, 3/4 inch, grade 24
13	1	R47082		2	TRUNNION inner race
14		REF		2	INSTRUCTION CYLINDER ASSEMBLY - lift, 2-1/2 (64) ID x 28 inch (711 mm) stroke, parts list figure 8-20
15		D24508		4	PIN
16		413-648		4	BOLT Hex, 3/8"-16 x 3", G5
17		492-11038		4	LOCK WASHER 3/8"
18		425-106		4	NUT 3/8"-16, G5
19		219-36		2	LUBE NIPPLE 45º, 1/8" NPT x 7/8" lg FITTING - grease, 45 degree, 1/8 PT x 7/8 inch
20		D46467		2	PIN - lift
21		103-16125		4	SNAP RING #125, Ext Ring, Snap, , Cylinder mounting pin #125, Ext
22		D46466		2	BRACKET - cylinder mounting
23		413-1036		4	BOLT Hex, 5/8"-11 x 2 1/4", G5 - hex, 5/8 NC x 2-1/4 inch, use with Loctite 242

(1) TRUNNION RACE THAT REF 13 SLIDES INTO IS D31317, SEE FIGURE 9-18.

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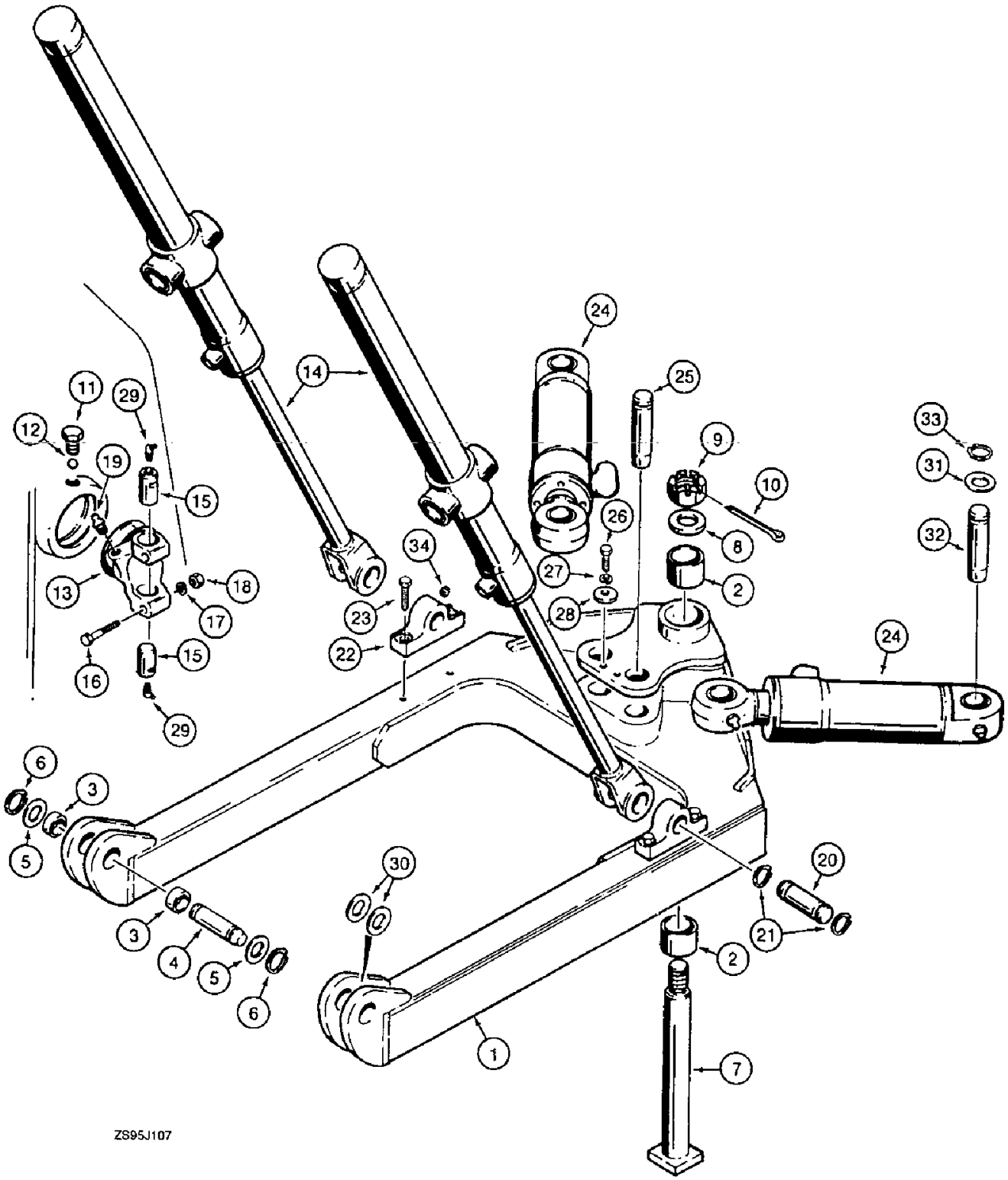
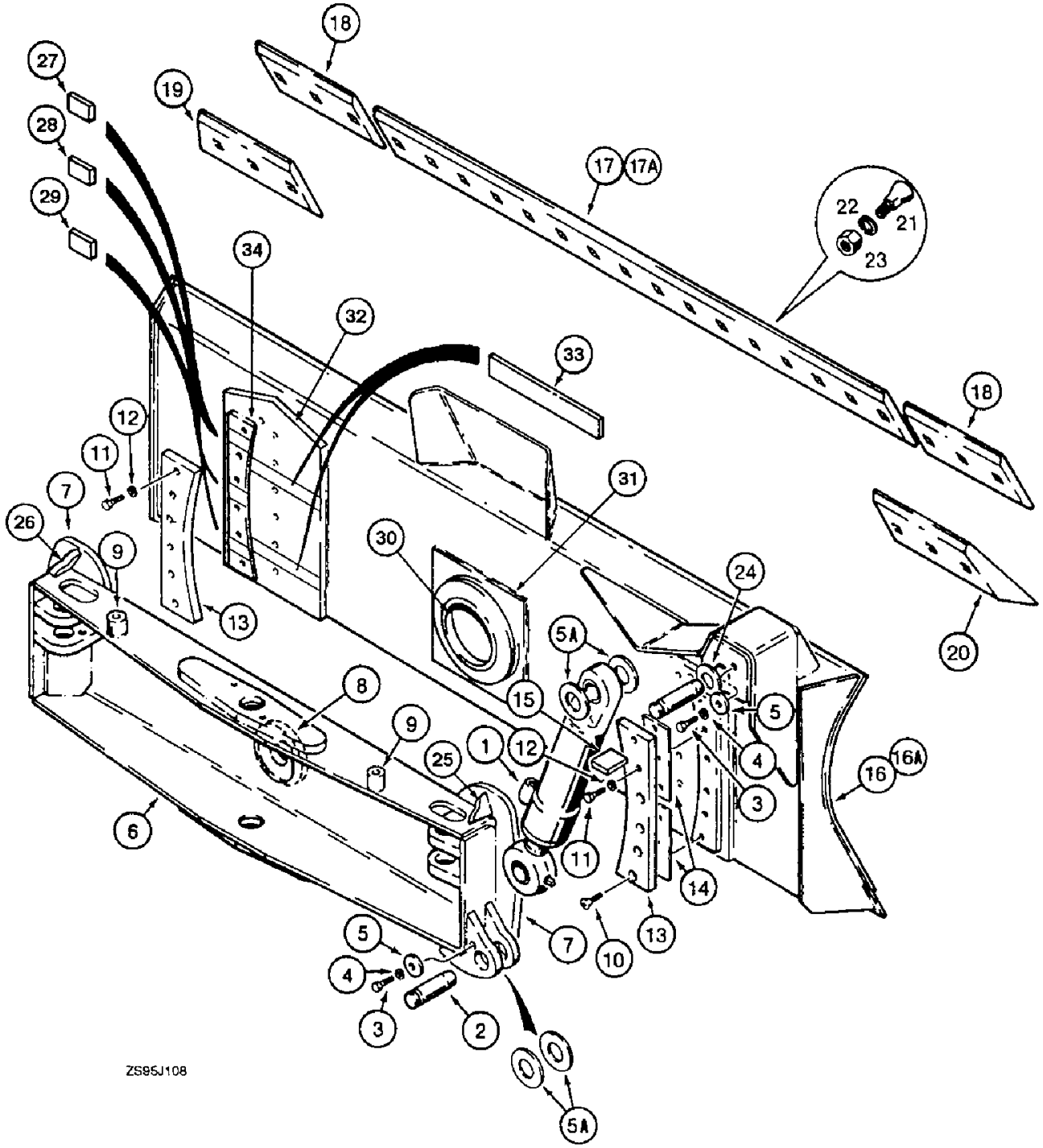
DOZER C-FRAME AND CYLINDERS



DOZER C-FRAME AND CYLINDERS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
24		REF		2	INSTRUCTION CYLINDER ASSEMBLY -angle, see parts list figure 8-24
25		D34795		2	AXLE PIN PIN - angle
26		413-1020		2	BOLT Hex, 5/8"-11 x 1 1/4", G5, Full Thd
27		492-11062		4	LOCK WASHER 5/8" WASHER, LOCK, 5/8"
28		70523		4	WASHER - flat, special
29		219-55		4	LUBE NIPPLE 90º, 1/8" NPT x .84" lg NIPPLE, LUBE, 90º, 1/8" NPT x .84" lg
30		D28610		UAR	WASHER - flat, special, 1-33/64 x 2-1/2 x 7/64 inch, used as shim inside the C-frame mounting lugs
31		A12089		UAR	WASHER - flat, special, used as shim between angle cylinder and leveling beam
32		D44881		2	PIN - angle cylinder to leveling beam
33		D25279		4	SNAP RING RING - snap, pin retaining
34		219-1		2	LUBE NIPPLE 1/8"-27 x .66 lg FITTING - grease, straight, 1/8PT x 21/32 inch

DOZER LEVELING BEAM, BLADE, AND TILT CYLINDER

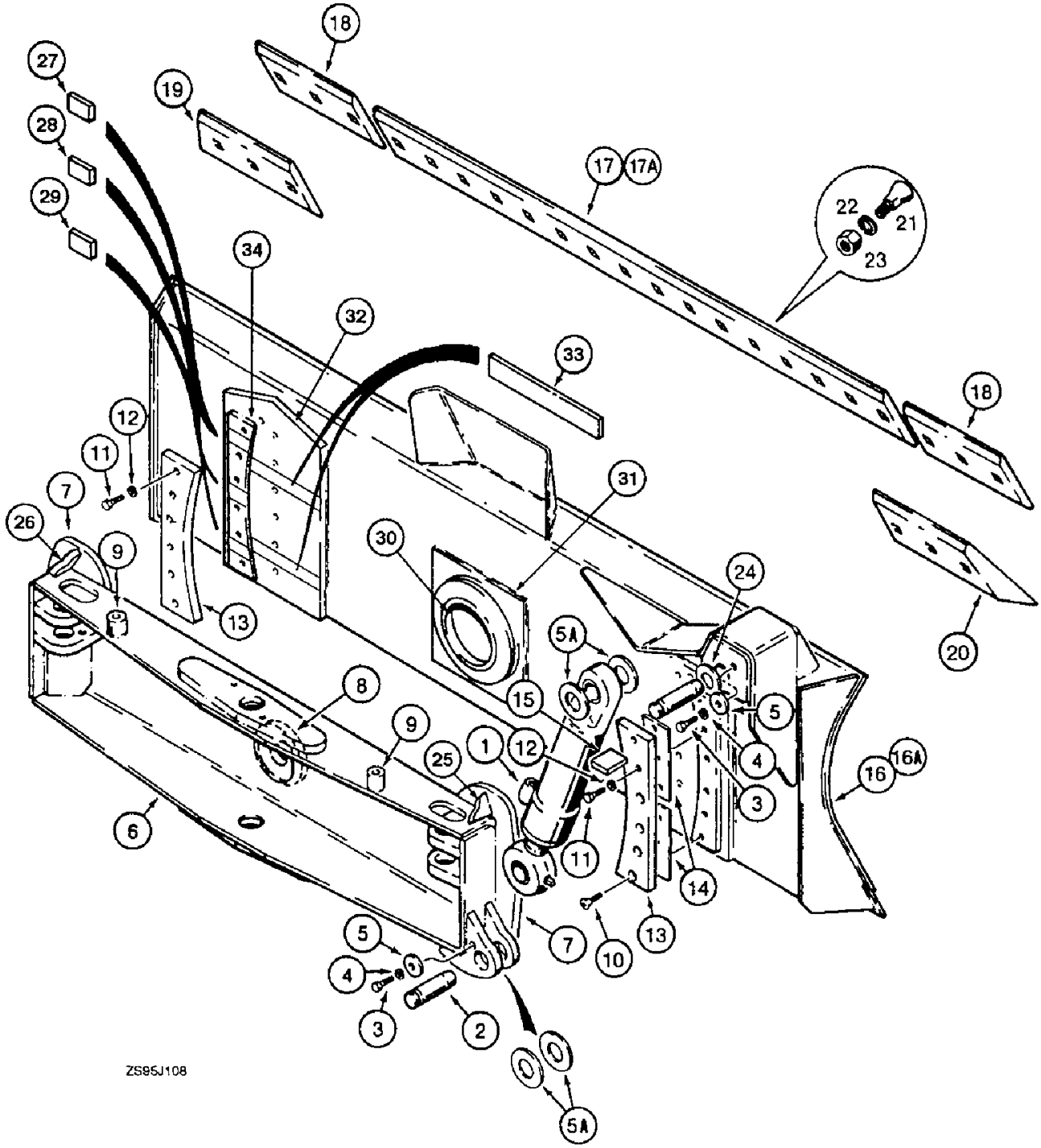


DOZER LEVELING BEAM, BLADE, AND TILT CYLINDER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		REF		1	INSTRUCTION CYLINDER ASSEMBLY - dozer tilt, see parts list figure 8-22
2		D34796		2	PIN - tilit cylinder mounting
3		413-1016		2	BOLT Hex, 5/8"-11 x 1", G5, Full Thd - hex, 5/8 NC x 1 inch
4		492-11062		2	LOCK WASHER 5/8" WASHER, LOCK, 5/8"
5		70523		2	WASHER - flat, special, pin retaining
5A		96-81002		4	WASHER 1 17/32" x 3" x .259", HDN - flat, 1-17/32 x 3 x 1/4 inch, hardened, tilt cylinder mounting at leveling beam and blade
		R58797		1	BEAM ASSEMBLY - leveling, dozer blade
6		NSS		1	NOT SERVICED SEPARATELY BEAM - leveling, dozer blade
7	1	R58793		2	LARGE PLATE PLATE - rub
8	1	D34869		1	LARGE PLATE PLATE - swivel
9		R58796		2	BLOCK - tapped
10		61-46224		4	HEX SOC SCREW Hex Soc Flat Hd, 5/8"-11 x 1 1/2" BOLT - hex socket, 5/8 NC x 1-1/2 inch
11		413-1028		8	BOLT Hex, 5/8"-11 x 1 3/4", G5 - hex, 5/8 NC x 1-3/4 inch
12		492-11062		8	LOCK WASHER 5/8" WASHER, LOCK, 5/8"
13	1	127980A1		2	LARGE PLATE PLATE - wear
14	1	D47911		UAR	SHIM .0359" Thk Wear plate .0359" Thk
15		D42402		1	GAUGE - leveling, welds to tilt cylinder guard, see figure 8-4
16		R58812		1	BLADE - 96 inch (2438 mm) wide, used on 53 inch gauge long track models
16A		R58813		1	BLADE - 104 inch (2642 mm) wide, used on 64 inch LGP models
17		R57844		1	EDGE Cutting, center, long track models, 72 inches OAL

(1) See service bulletin NCR SB 021.292 for installation instructions.

DOZER LEVELING BEAM, BLADE, AND TILT CYLINDER

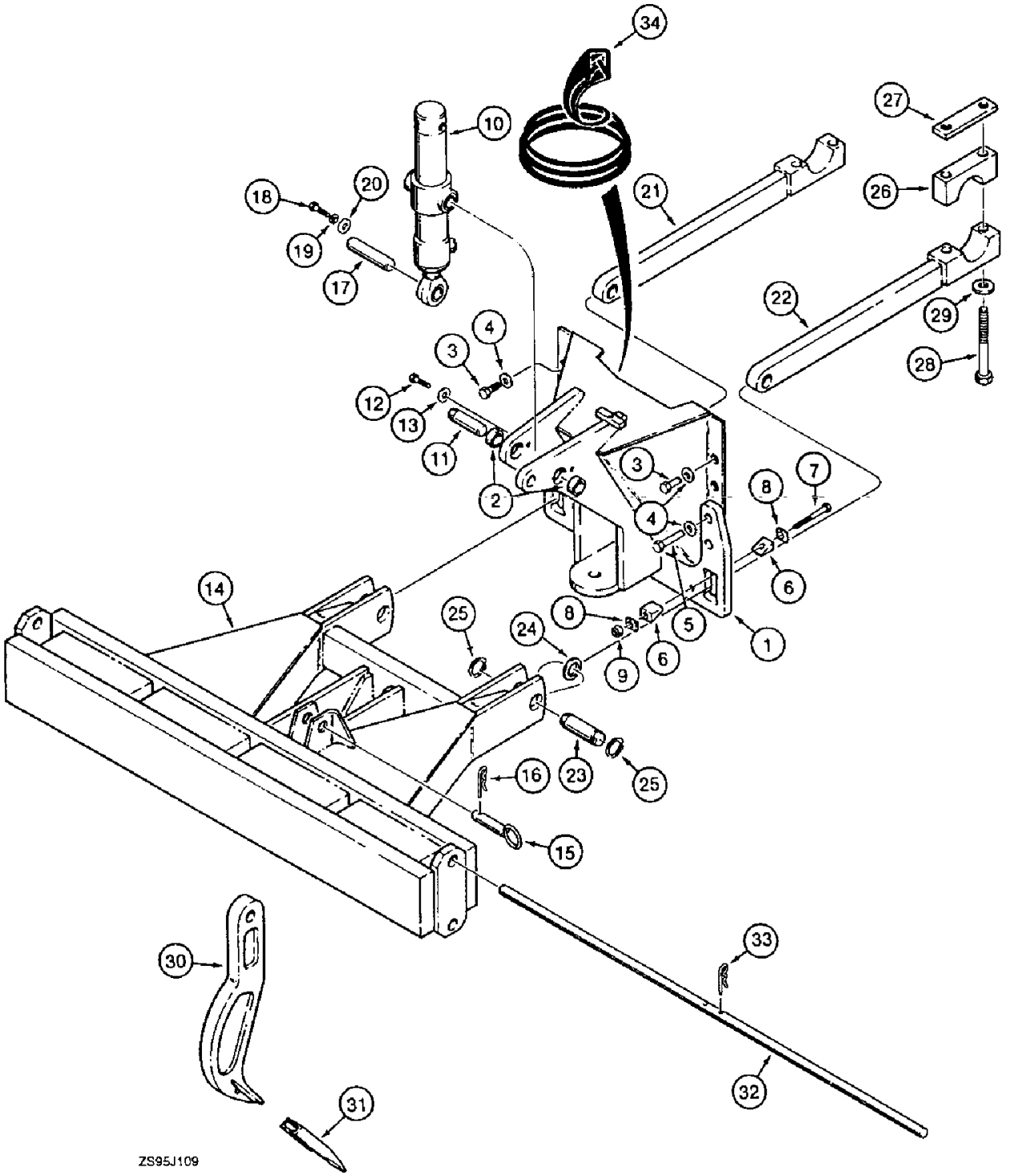


DOZER LEVELING BEAM, BLADE, AND TILT CYLINDER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
17A		R57843		1	EDGE, CUTTING Center, LGP models 80 inches OAL
18		R57841		2	EDGE, CUTTING EDGE - cutting, end, standard
19		R57846		1	EDGE, CUTTING EDGE - cutting, left-hand end, heavy duty
20		R57845		1	EDGE, CUTTING EDGE - cutting, right-hand end, heavy duty
21		20-2828		24-26	CARRIAGE BOLT 1/2"-13 x 1 3/4", G8 BOLT - plow, 1/2 NC x 1-3/4 inch
22		80679		24-26	LOCK WASHER 1/2" WASHER, LOCK, 1/2"
23		429-108		24-26	NUT 1/2"-13, G8 - hex, 1/2 inch NC, grade 8
24		A12089		UAR	WASHER - flat, special
25	1	107461A1		1	GUSSET - leveling beam
26	1	107462A1		1	GUSSET - leveling beam
27	1	R40625		2	SHIM .104" Thk Mounting plate .104" Thk
28	1	R40624		2	SHIM .059" Thk Mounting plate .059" Thk
29	1	R40623		2	SHIM .024" Thk Mounting plate .024" Thk
30	1	D34855		1	RING - swivel, blade
31	1	R48943		1	LARGE PLATE PLATE - swivel backing
32	1	R58809		2	LARGE PLATE PLATE - backing
33	1	R40626		2	SHIM .024" Thk Backing plate .024" Thk
34	1	R58808		2	LARGE PLATE PLATE - tapped mounting

(1) See service bulletin NCR SB 021.292 for installation instructions.

RIPPER



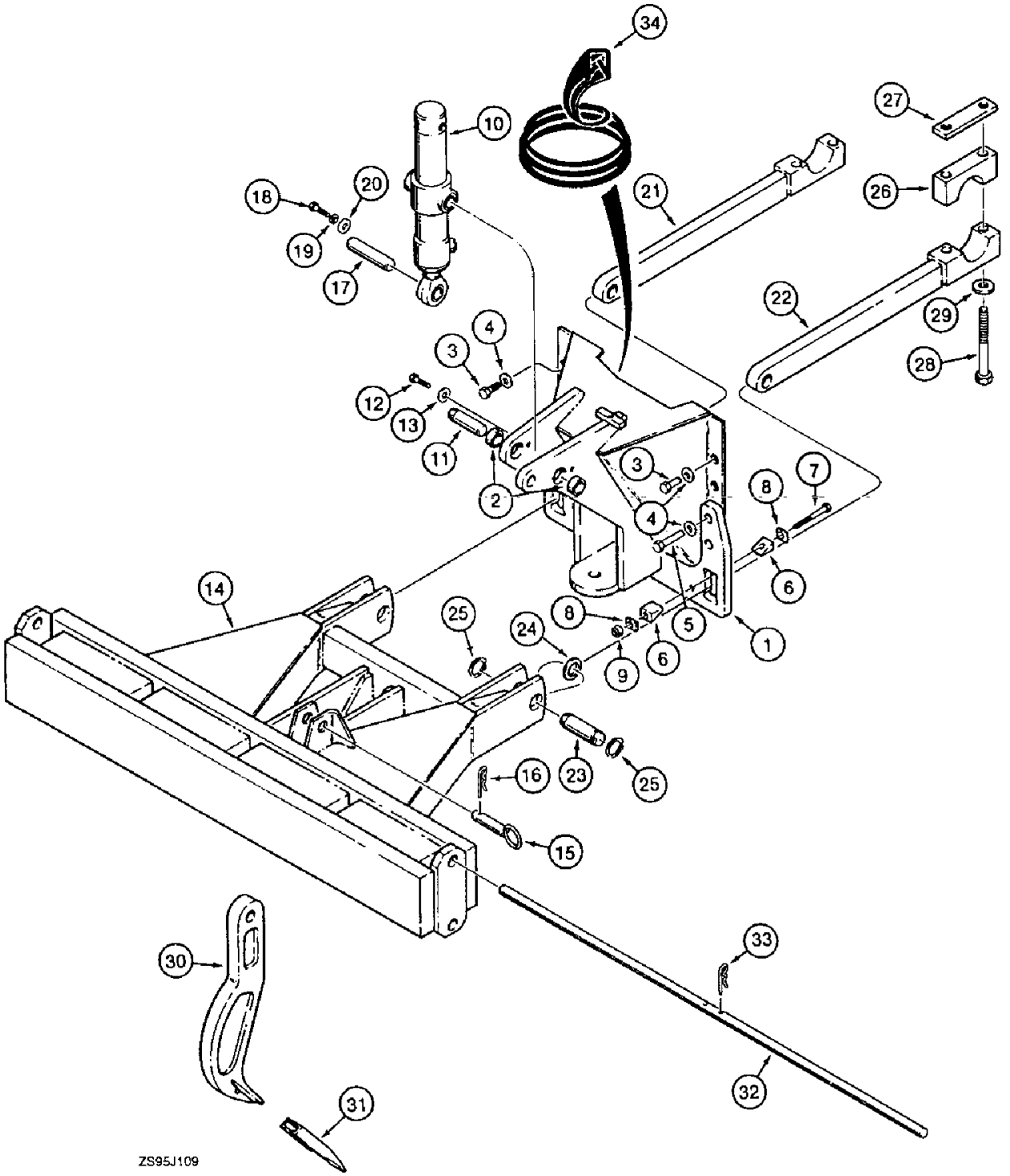
RIPPER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R54403		1	LARGE PLATE SUPPORT ASSEMBLY - ripper mounting
2		D32890		2	BUSHING - cylinder mounting
3		326-1220		4	BOLT Hex, 3/4"-10 x 1 1/4", G8
4		D34666		8	WASHER - flat, special
5		326-1236		4	BOLT Hex, 3/4"-10 x 2 1/4", G8
6		D34678		4	BLOCK - wedge
7		413-836		2	BOLT Hex, 1/2"-13 x 2 1/4", G5 - hex, 1/2 NC x 2-1/4 inch
8		D34705		4	WASHER - special, 1/2 inch
9		231-4118		2	LOCK NUT 1/2"-13, GB NUT - hex, self-locking, 1/2 inch NC
10		REF		1	INSTRUCTION CYLINDER ASSEMBLY - ripper, parts list figure 8-26
11		D34706		2	PIN - cylinder to ripper support
12		413-1016		2	BOLT Hex, 5/8"-11 x 1", G5, Full Thd - hex, 5/8 NC x 1 inch
13		70523		2	WASHER - flat, special
14		D35886		1	FRAME - ripper
15		D34715		1	PIN - self-locking, ripper frame to ripper support
16		136-162		1	HAIR PIN COTTER Int, 1/2" x .250" PIN - hair, 1/2 x 3-1/4 inch, internal type
17		D36174		1	AXLE PIN PIN - cylinder to ripper frame
18		413-812		2	BOLT Hex, 1/2"-13 x 3/4", G5, Full Thd - hex, 1/2 NC x 3/4 inch
19		80679		2	LOCK WASHER 1/2" WASHER, LOCK, 1/2"
20		D25022		2	WASHER - flat, special
21		R47375		1	ARM - left-hand, ripper frame mounting
22		R47376		1	ARM - right-hand, ripper frame mounting
23		D36614		2	PIN - to mounting arms
24		R15389		2	SPACER - pin
25		103-16125		4	SNAP RING #125, Ext Ring, Snap, , Pin #125, Ext
26		D34663		2	CLAMP - mounting arm to pivot shaft

Ripper attachment cannot be used on models with rubber track.

550E

RIPPER



RIPPER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
27		D34722		2	BLOCK - tapped
28		413-14120		4	BOLT Hex, 7/8"-9 x 7 1/2", G5 - hex, 7/8 NC x 7-1/2 inch, use with Loctite "CV"
29		D34667		4	WASHER - special
30		D35885		3	SHANK - tooth, ripper
31		R33815		3	POINT TOOTH - ripper
32		D35900		1	ROD - attaching, ripper teeth
33		136-162		2	HAIR PIN COTTER Int, 1/2" x .250" PIN - hair, 1/2 x 3-1/4 inch, internal type
34		D43403		1	LINING TRIM - edge, 5 inch (127 mm) long, hose protector, at ripper support, cut from F42827 bulk roll, see below
		F42827		1	RUBBER STRIP TRIM - edge, bulk, 116 inch (2946 mm) long, for use on Ref. 34

Ripper attachment cannot be used on models with rubber track.

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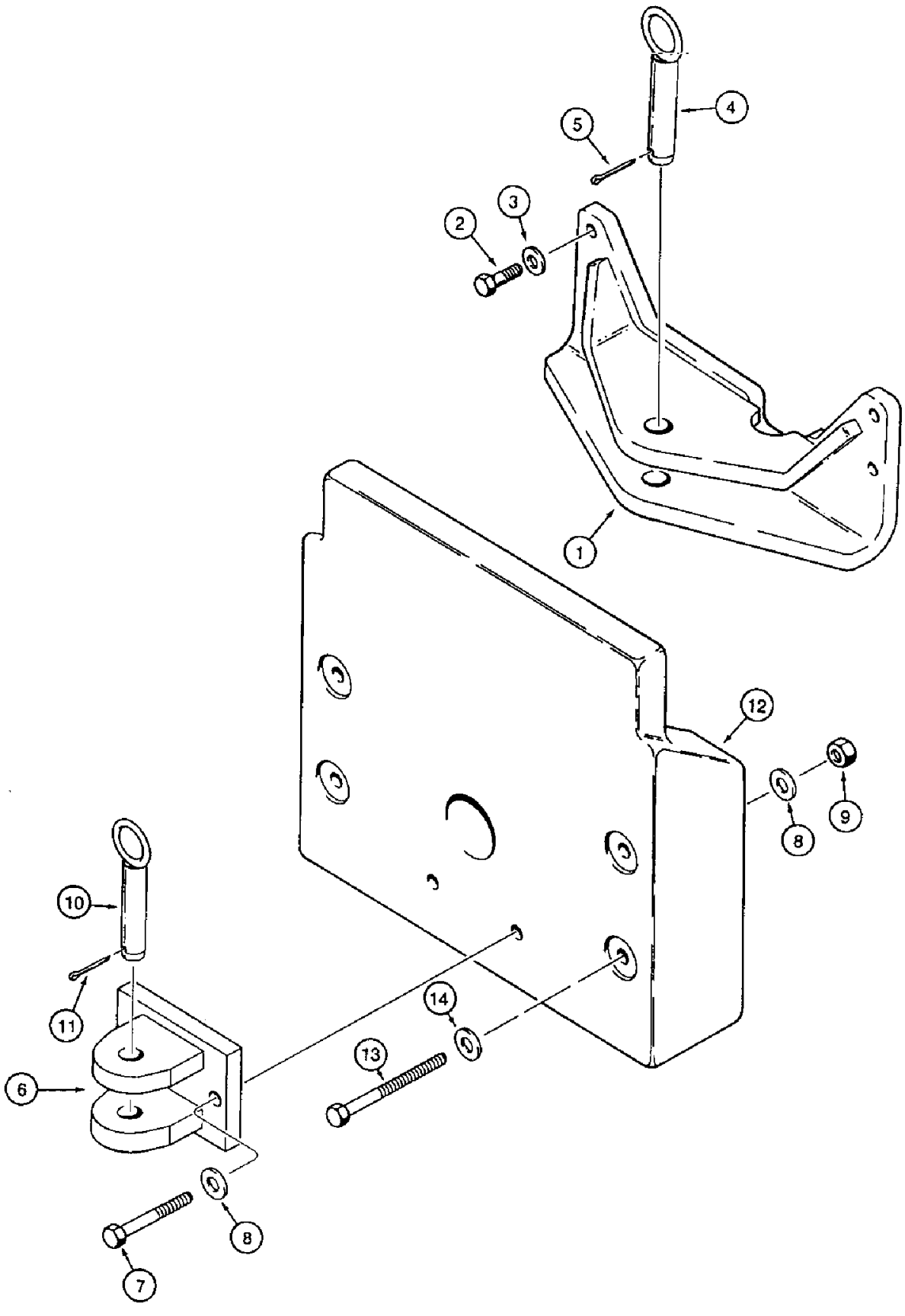
DRAWBARS AND COUNTERWEIGHT, WITH NO REAR EQUIPMENT, 64 INCH GAUGE LGP MODELS



DRAWBARS AND COUNTERWEIGHT, WITH NO REAR EQUIPMENT, 64 INCH GAUGE LGP MODELS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R47224		1	DRAWBAR - used on models with no rear equipment
2		326-1232		4	BOLT Hex, 3/4"-10 x 2", G8
3		D34666		4	WASHER - flat, special, 3/4 inch hardened
4		R24105		1	DRAWBAR PIN - draw bar
5		32-1632		1	COTTER PIN 1/4" x 2" PIN, SPLIT (COTTER), 1/4" x 2"
6		R39904		1	DRAWBAR - used on models with no rear equipment and counterweight
7		326-1272		2	BOLT Hex, 3/4"-10 x 4 1/2", G8 With no rear equipment 53 inch gauge long track models Hex, 3/4"-10 x 4 1/2", G8
8		T53681		4	WASHER - flat, speciall, 3/4 inch hardened, with no rear equipment 53 inch gauge long track models
9		425-1012		2	NUT 3/4"-10, G5 With no rear equipment 53 inch gauge long track models 3/4"-10, G5
10		R24105		1	DRAWBAR PIN - drawbar, with no rear equipment 53 inch gauge long tack models
11		32-1632		1	COTTER PIN 1/4" x 2" PIN, SPLIT (COTTER), , With no rear equipment 53 inch gauge long track models 1/4" x 2"
12		R57072		1	BALANCER COUNTERWEIGHT - rear, 500 pound (227 kg), with no rear equipment 53 inch gauge long track models
13		413-12120		4	BOLT Hex, 3/4"-10 x 7 1/2", G5 - hex, 3/4 NC x 7-1/2 inch, grade 8, with no rear equipment 53 inch gauge long track models
14		T53681		4	WASHER - flat, special, 20 x 44 x 6, hardened, with no rear equipment 53 inch gauge long track models

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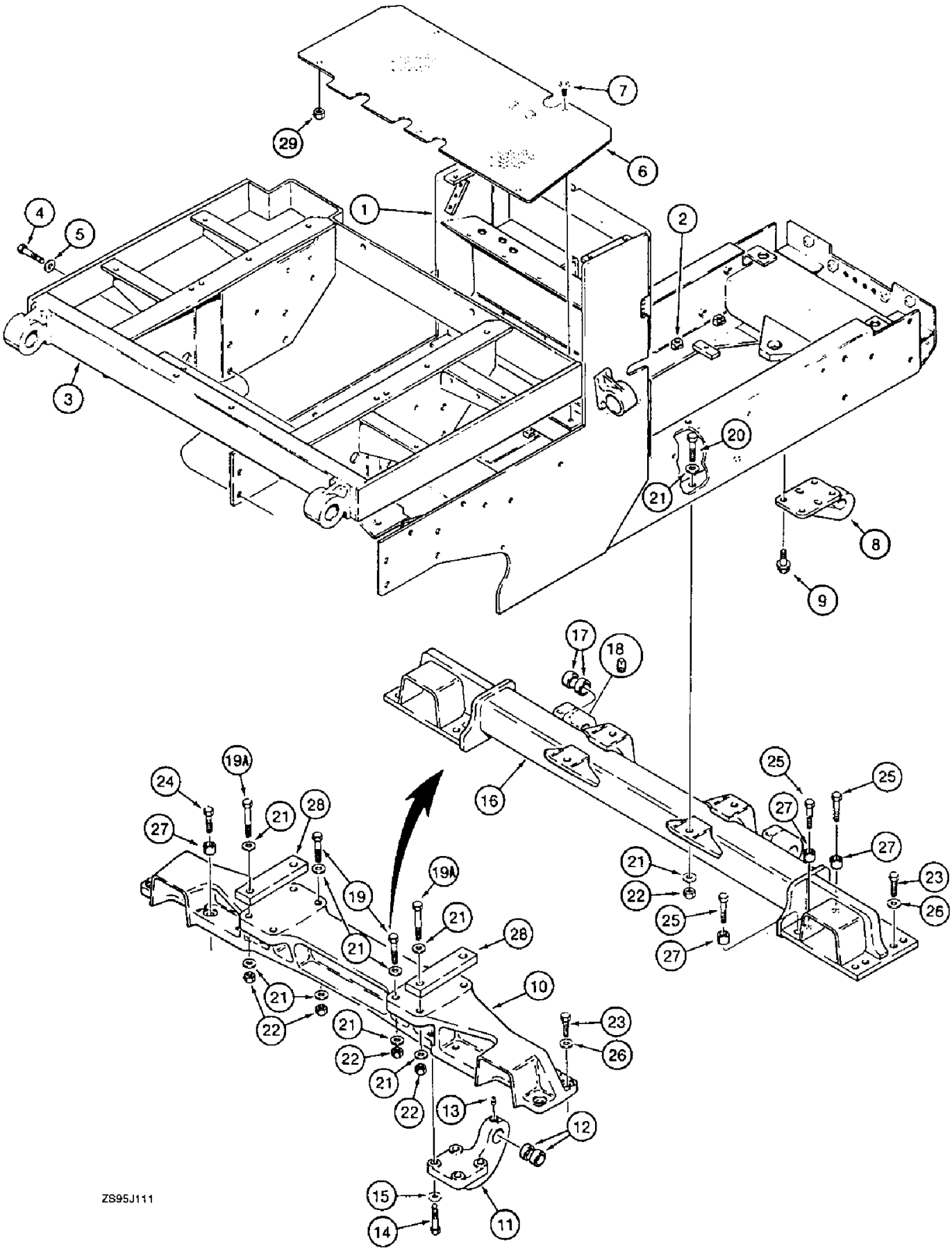
MAIN, ENGINE, SEAT AND TANK FRAMES



MAIN, ENGINE, SEAT AND TANK FRAMES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58613		1	FRAME - main and engine
2		224-28010		10	SQUARE NUT Sq, 5/8"-11, G2, Hvy - heavy square, 5/8 inch NC, weld on, for undercarriage guards
3		R58150		1	FRAME - seat and tank
4		426-1228		8	BOLT Hex, 3/4"-10 x 1 3/4", G8 - hex, 3/4 NC x 1-3/4 inch, grade 8, seat and track frame to main frame and transmission, use with Loctite 242
5		T53681		8	WASHER - flat, 20 x 44 x 6 mm, special
6		R58655		1	PLATE - floor
7		160-107		5	BOLT Hex Flg, 1/2"-13 x 1 1/4", G8, Full Thd
8		R50469		1	HOOK - pull, if used
9		160-108		6	BOLT Hex Flg, 1/2"-13 x 1 1/2", G8, Full Thd - hex flange, 1/2 NC x 1-1/2 inch, grade 8
10		R47683		1	LARGE PLATE CROSSMEMBER - front, 53 inch gauge long track and rubber track models
11		R55861		2	BRACKET - C-frame mounting, 53 inch gauge long track and rubber track models
12		D30930		2	BUSHING - 1-1/2 ID x 1-7/8 OD x 11/16 inch long
13		219-1		2	LUBE NIPPLE 1/8"-27 x .66 lg FITTING - grease, straight, 1/8 inch PT x 21/32 inch
14		326-1252		8	BOLT Hex, 3/4"-10 x 3 1/4", G8 53 inch gauge long track and rubber track models Hex, 3/4"-10 x 3 1/4", G8
15		D34666		8	WASHER - flat, special, hardened, 53 inch gauge long track and rubber track models
16		R54432		1	DRAWBAR CROSSMEMBER - front, 64 inch gauge LGP models only
17		D30930		4	BUSHING - C-frame mounting lug,1-1/2 ID x 1-7/8 OD x 11/16 inch long

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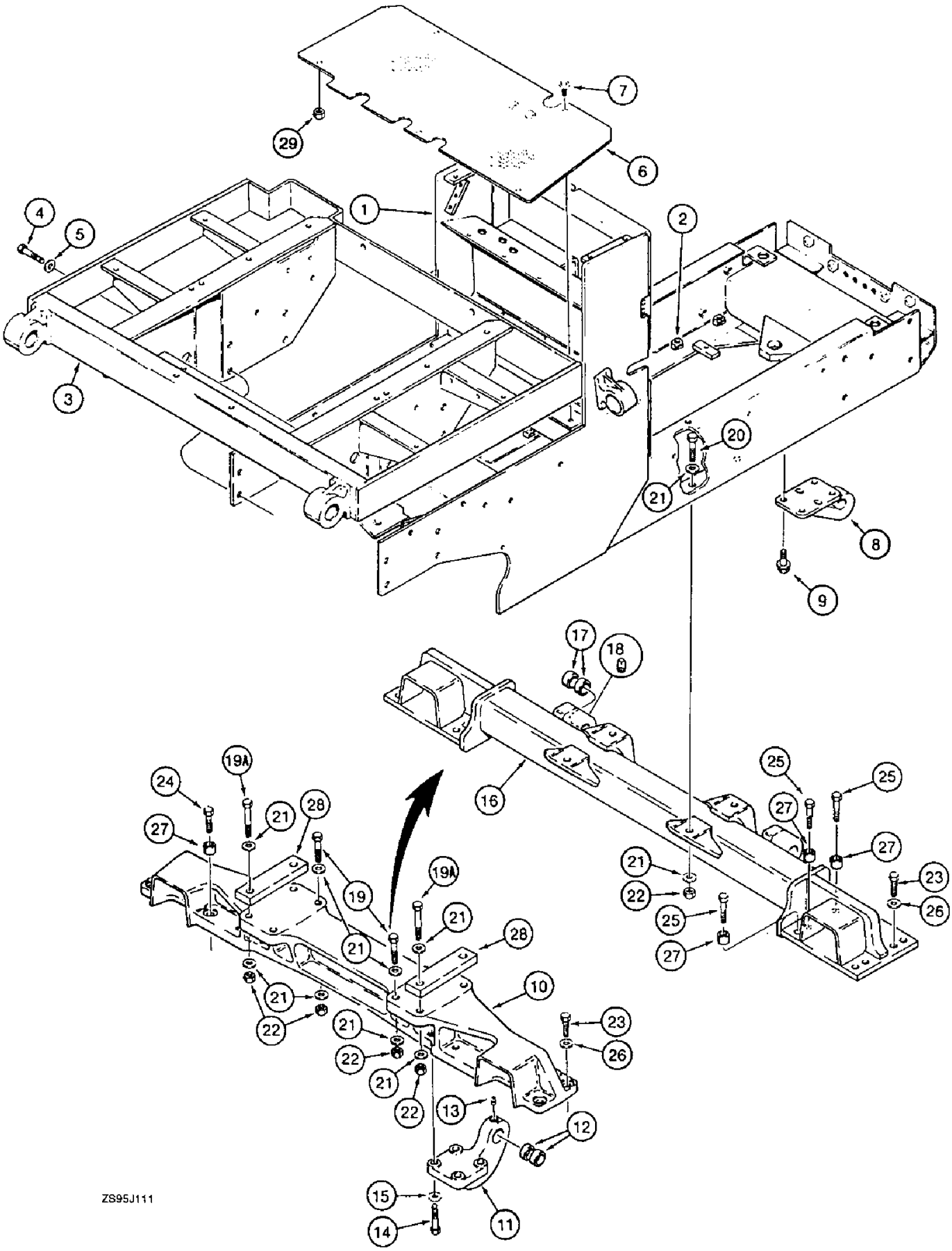
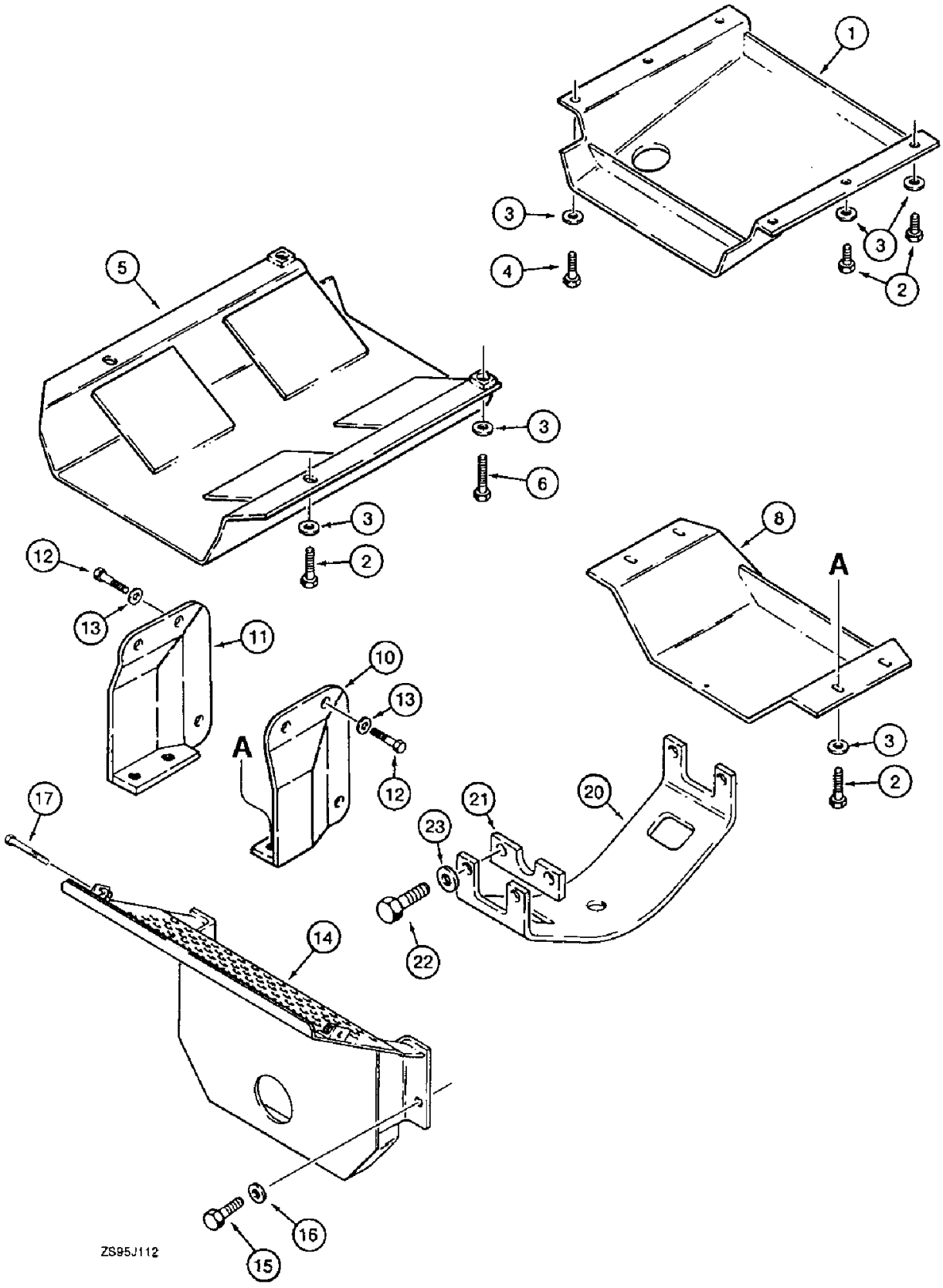
MAIN, ENGINE, SEAT AND TANK FRAMES



MAIN, ENGINE, SEAT AND TANK FRAMES

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
18		217-430		2	PLUG Hex Soc, 1/8"-27 - hex socket, 1/8 inch PT, C-frame mounting lug
19		326-1256		4	BOLT Hex, 3/4"-10 x 3 1/2", G8 53 inch gauge long track models only Hex, 3/4"-10 x 3 1/2", G8
19A		326-1280		4	BOLT Hex, 3/4"-10 x 5", G8 53 inch gauge rubber track models only Hex, 3/4"-10 x 5", G8
20		326-1248		4	BOLT Hex, 3/4"-10 x 3", G8 64 inch gauge LGP models only Hex, 3/4"-10 x 3", G8
21		D34666		8	WASHER - flat, special, hardened
22		232-41112		4	NUT 3/4"-10, GC NUT, LOCK, 3/4"-10, GC
23		113-2714		4	LOCK BOLT Locking, 3/4"-10 x 2", G8 BOLT, Locking, 3/4-10 x 2", G8, Outer holes
24		326-1252		4	BOLT Hex, 3/4"-10 x 3 1/4", G8 Use with Loctite 242, inner holes, 53 inch gauge long track and rubber track models Hex, 3/4"-10 x 3 1/4", G8
25		113-2719		6	LOCK BOLT Locking, 3/4"-10 x 3", G8 BOLT, , Inner holes, 64 inch gauge LGP models Locking, 3/4"-10 x 3", G8
26		D34666		4	WASHER - flat, special, hardened, outer holes
27		R30398		4-6	SPACER - used on 53 inch gauge long track and rubber track models; six used on 64 inch gauge LGP models
28		R58320		2	SPACER - crossmember to frame, rubber track models only
29		231-5148		2	BEARING LOCK NUT Flg, USR, 1/2"-13

UNDERCARRIAGE GUARDS AND REAR TRANSMISSION GUARDS



UNDERCARRIAGE GUARDS AND REAR TRANSMISSION GUARDS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R46842		1	GUARD - front, engine
2		413-1024		8	BOLT Hex, 5/8"-11 x 1 1/2", G5, Full Thd
3		T53567		14	BEARING WASHER 0.656" ID x 1.312" OD x 0.135" WASHER - flat, special, hardened
4		413-1032		4	BOLT Hex, 5/8"-11 x 2", G5 - hex, 5/8 NC x 2 inch
5		125071A1		1	SHIELD GUARD - center, torque converter and transmission
6		413-1040		2	BOLT Hex, 5/8"-11 x 2 1/2", G5 - hex, 5/8 NC x 2-1/2 inch
8		R52242		1	GUARD - rear, transmission
10		R58652		1	COVER - side, transmission, right-hand
11		R58653		1	COVER - side, transmission, left-hand
12		326-1232		6	BOLT Hex, 3/4"-10 x 2", G8
13		496-21081		6	WASHER 13/16" x 1 1/2" x .179", HDN
14		R47231		1	GUARD - upper rear, transmission, used on models with no rear equipment, if used
15		413-1220		2	BOLT Hex, 3/4"-10 x 1 1/4", G5 - hex, 3/4 NC x 1-1/4 inch
16		D34666		2	WASHER - flat, special, hardened
17		160-107		2	BOLT Hex Flg, 1/2"-13 x 1 1/4", G8, Full Thd
20		R57675		2	GUARD - final drive, do not use with rubber track
21		R57676		2	SPACER - to final drive
22		326-1244		8	BOLT Hex, 3/4"-10 x 2 3/4", G8 Use with Loctite 242 Hex, 3/4"-10 x 2 3/4", G8
23		T53681		4	WASHER - flat, special, hardened

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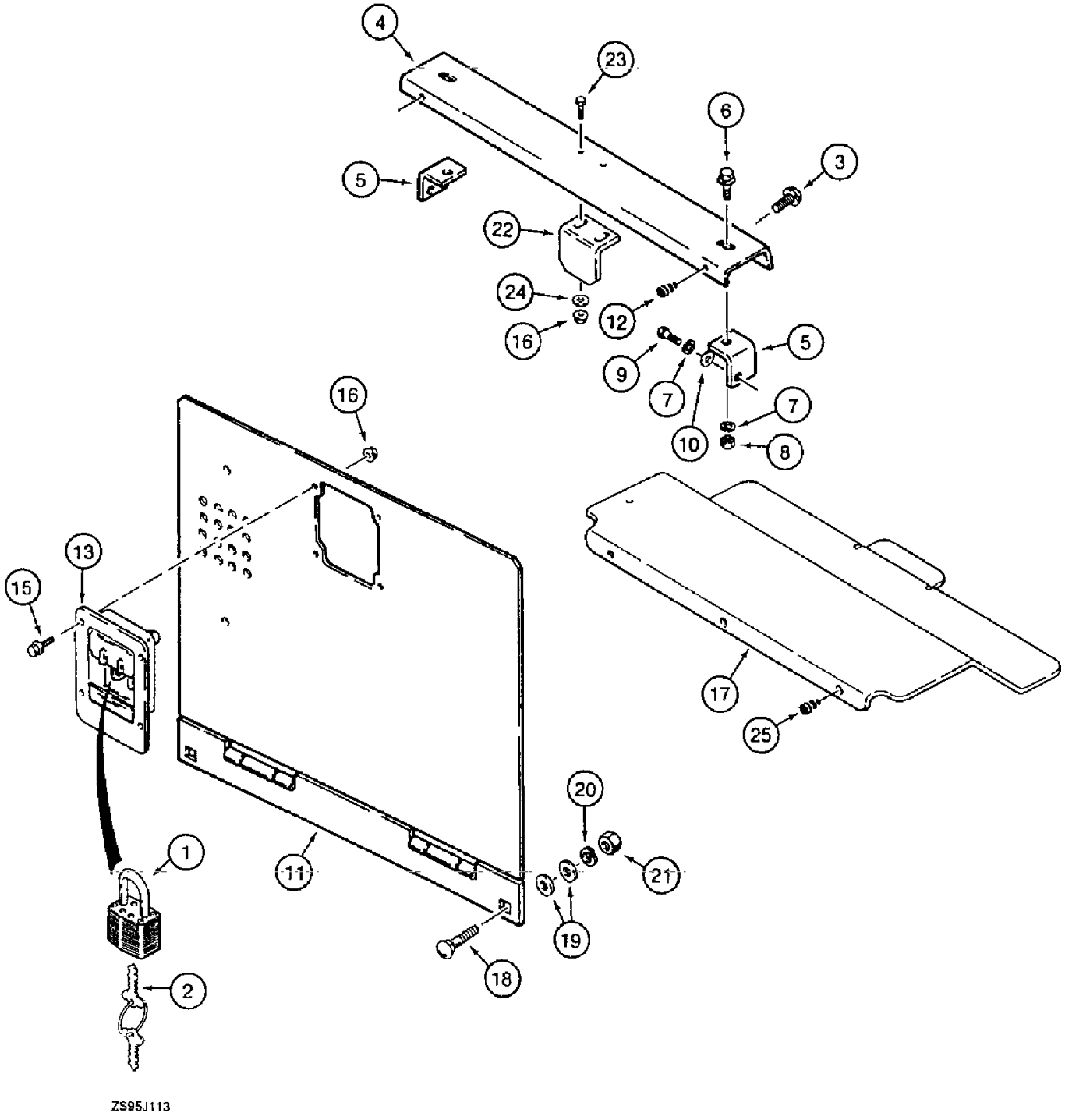
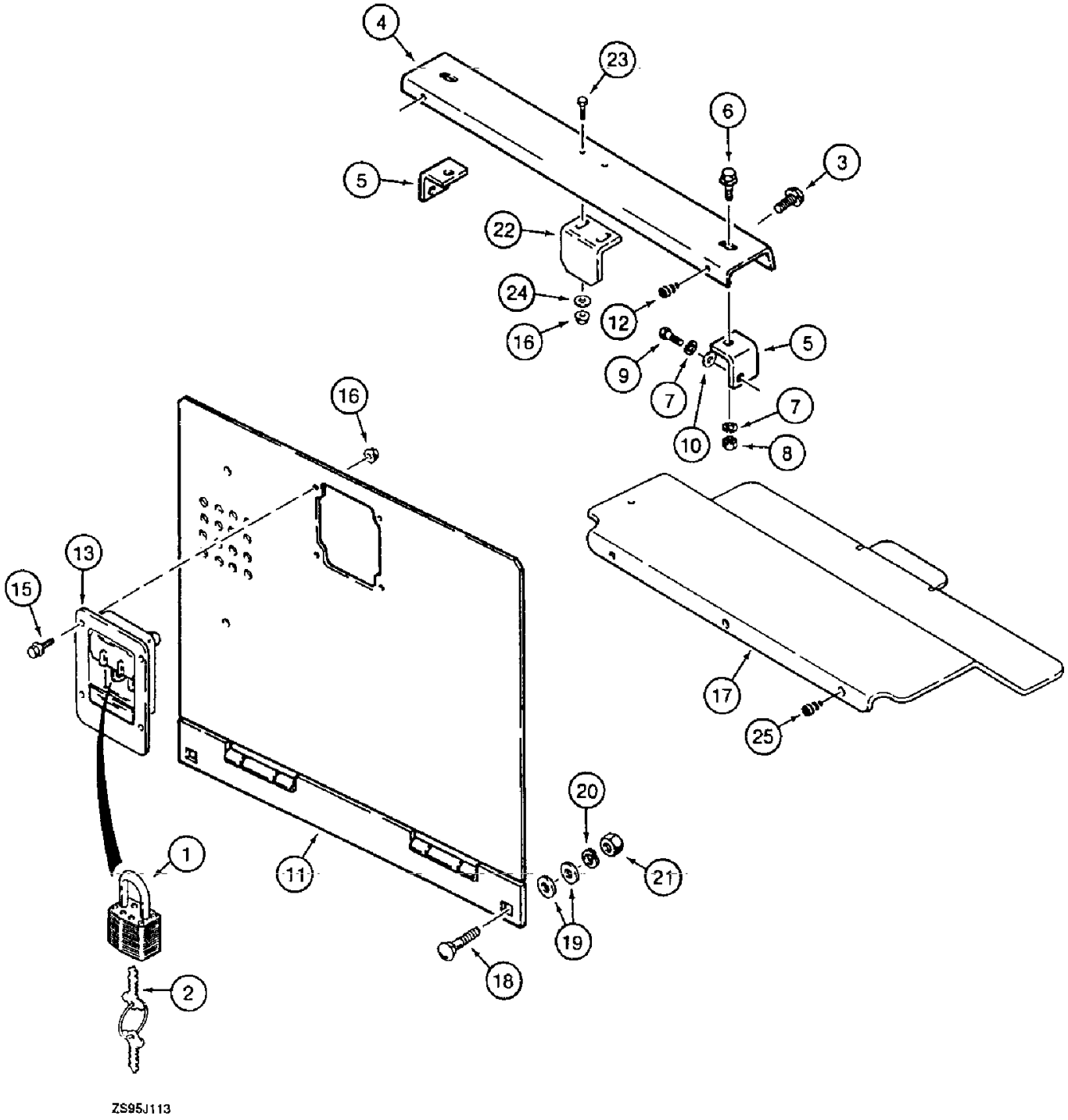
BATTERY COMPARTMENT AND REAR COVER



BATTERY COMPARTMENT AND REAR COVER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		D93753		1	PADLOCK - rear cover latch, includes keys, if used
2		R29555		2	KEY - for Master padlock only
2		D93751		2	SET OF 2 KEYS KEY - for Yale padlock only
3		160-106		2	BOLT Hex Flg, 1/2"-13 x 1", G8, Full Thd
4		R57059		1	COVER BRACKET - cover mounting
5		R48725		2	SUPPORT BRACKET - mounting
6		160-102		2	BOLT Hex Flg, 3/8"-16 x 1", G8, Full Thd
7		492-11038		4	LOCK WASHER 3/8"
8		425-106		2	NUT 3/8"-16, G5
9		413-612		2	BOLT Hex, 3/8"-16 x 3/4", G5, Full Thd
10		495-11041		2	WASHER 3/8", SAE (Flat, 13/32 x 13/16 x 1/16") 3/8", SAE
11		R55501		1	COVER - rear, hinged, see figure 9-38 items 5 and 14 for decals
12		A161780		2	BUMPER - rubber (item 4)
13		R56221		1	LATCH - rear cover
15		458-412		4	BOLT Hex Flg, 1/4"-20 x 3/4", G5, Full Thd - hex flange, 1/4 NC x 3/4 inch
16		231-5344		6	BEARING LOCK NUT Flg, 1/4"-20 NUT, LOCK, Flg, 1/4"-20
17		R58789		1	COVER - battery
18		411-820		2	CARRIAGE BOLT Short NK, 1/2"-13 x 1 1/4", G2 BOLT - carriage, 1/2 NC x 1-1/4 inch, grade 2
19		495-11053		4	WASHER 1/2", SAE (17/32" x 1-1/16" x 3/32") 1/2", SAE
20		80679		2	LOCK WASHER 1/2" WASHER, LOCK, 1/2"
21		425-108		2	NUT 1/2"-13, G5 NUT, , Hex 1/2"-13, G5
22		R57058		1	SUPPORT STRIKER - latch, rear cover latch
23		413-412		2	BOLT Hex, 1/4"-20 x 3/4", G5, Full Thd - hex, 1/4 NC x 3/4 inch

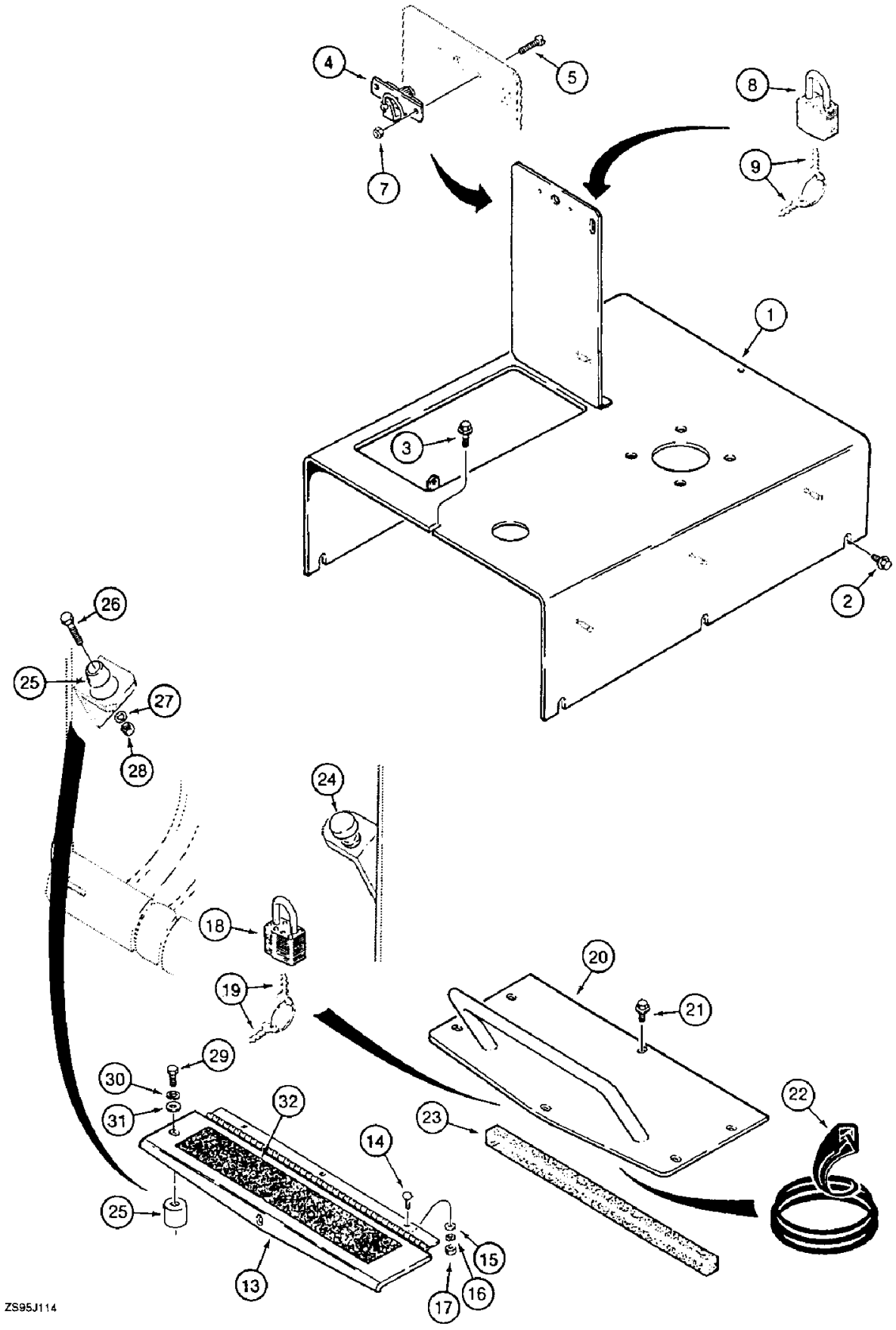
BATTERY COMPARTMENT AND REAR COVER



BATTERY COMPARTMENT AND REAR COVER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
24		495-21031		2	WASHER 1/4" - flat, 5/16 x 3/4 x 1/16 inch
25		F22426		3	STOP BUMPER - rubber, battery cover

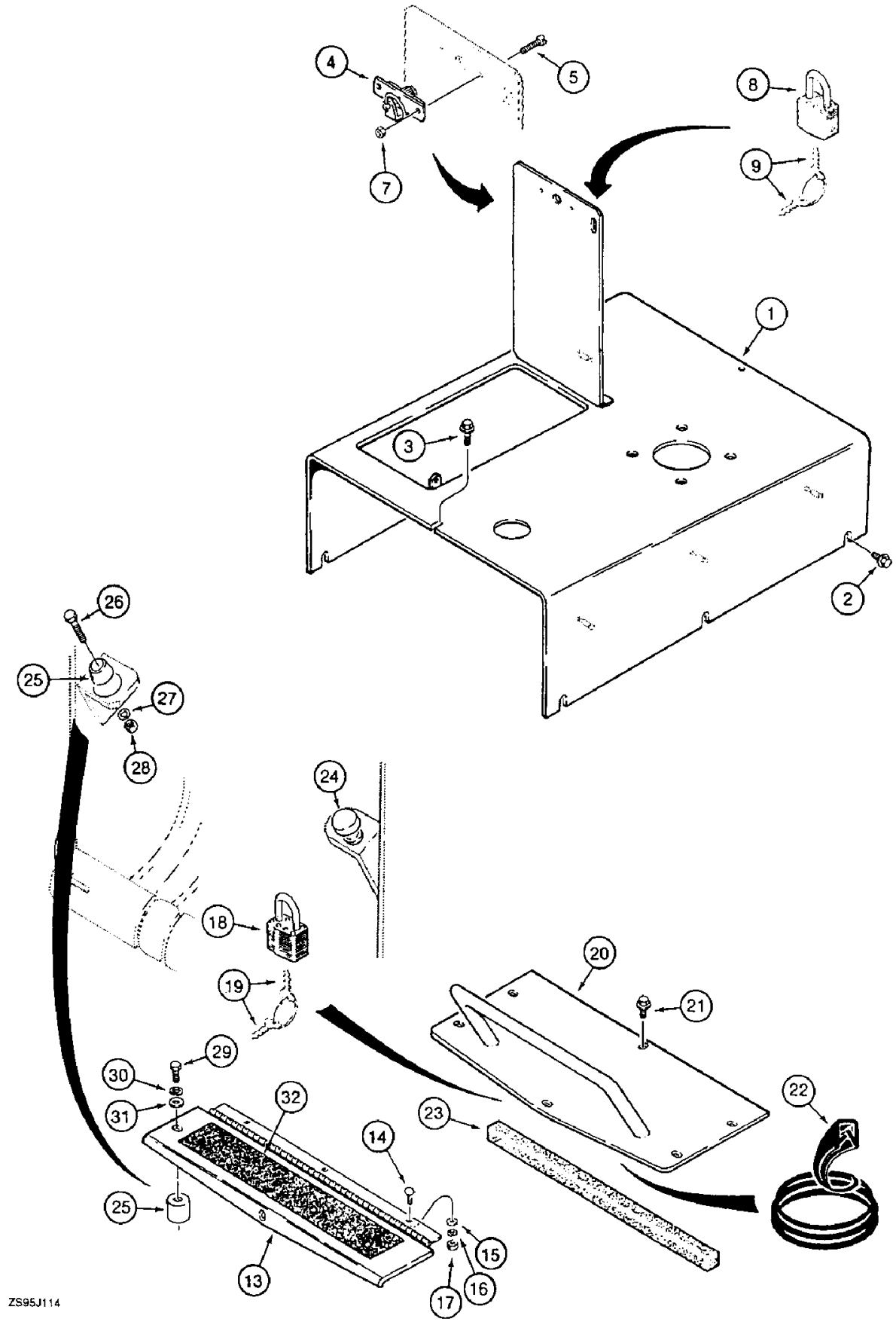
HOOD AND INSTRUMENT PANEL COVER



HOOD AND INSTRUMENT PANEL COVER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R46906		1	HOOD - engine
2		160-106		6	BOLT Hex Flg, 1/2"-13 x 1", G8, Full Thd
3		160-107		1	BOLT Hex Flg, 1/2"-13 x 1 1/4", G8, Full Thd
4		L102515		1	LATCH FASTENER - air cleaner access door
5		70-1108		2	SCREW Slotted Pan Hd, #10-24 x 1/2" - machine, pan head slotted, No. 10 NC x 1/2 inch
7		F45165		2	NUT NUT - lock, hex, No. 10 NC
8		D93753		1	PADLOCK - includes keys
9		R29555		2	KEY - for Master padlock only
9		D93751		2	SET OF 2 KEYS KEY - for Yale padlock only
13		R58731		1	COVER - instrument panel
14		A42923		3	CARRIAGE BOLT BOLT - carriage, special, 5/16 NC x 27/32 inch
15		495-11034		3	WASHER 5/16", SAE 5/16" SAE (flat, 11/32 x 11/16 x 1/16")
16		492-11031		3	LOCK WASHER 5/16" WASHER, LOCK, 5/16"
17		425-105		3	NUT 5/16"-18, G5
18		D93753		1	PADLOCK - includes keys
19		R29555		2	KEY - for Master padlock only
19		D93751		2	SET OF 2 KEYS KEY - for Yale padlock only
20		R58736		1	COVER PLATE - hood extension, with grab handle
21		160-101		5	BOLT Hex Flg, 3/8"-16 x 3/4", G8, Full Thd - hex flange, 3/8 NC x 3/4 inch, grade 8
22		R58738		1	RUBBER TRIM - edge, 23-1/4 inch (590 mm) long, hood extension plate
23		R40035		1	PAD - 21-1/2 (546) x 1 (25) x 1 inch (25 mm), cut from R30870 bulk pad, plate (546) x 1 (25) x 1 inch (25 mm), cut from R30870, see below

HOOD AND INSTRUMENT PANEL COVER



HOOD AND INSTRUMENT PANEL COVER

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
24		R38089		1	CUSHION ASSY. BUMPER - rubber, instrument panel cover
25		R58735		1	HOLDER RETAINER - hold open, instrument panel cover, includes socket and plunger
27		492-11025		1	LOCK WASHER 1/4" WASHER, LOCK, 1/4"
28		425-104		1	NUT 1/4"-20, G5 - hex, 1/4 inch NC
29		413-510		1	BOLT Hex, 5/16"-18 x 5/8", G5, Full Thd
30		492-11031		1	LOCK WASHER 5/16" WASHER, LOCK, 5/16"
31		495-11034		1	WASHER 5/16", SAE 5/16" SAE (flat, 11/32 x 11/16 x 1/16")
32		H332536		1	PAD STRIP - anti-skid, on backside of instrument panel cover, see item 13
		R30870		UAR	PAD - bulk, 54 (1372) x 72 (1829) x 1 inch (25 mm) thick
		345-44		UAR	ADHESIVE - spray can, 3M No. 74, 23 ounce
26		413-420		1	BOLT Hex, 1/4"-20 x 1 1/4", G5

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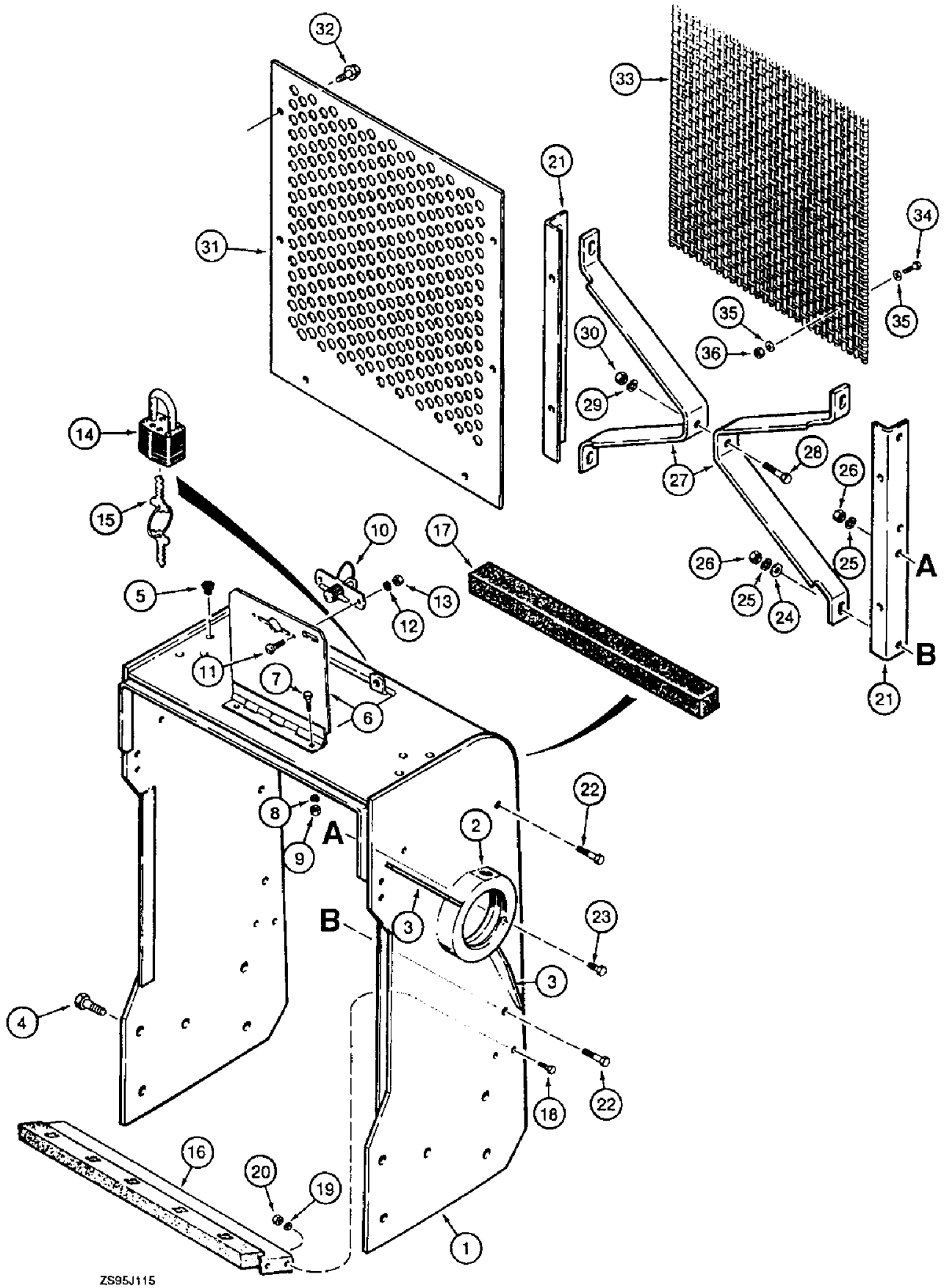
RADIATOR SHROUD, GRILLE, AND SCREEN



RADIATOR SHROUD, GRILLE, AND SCREEN

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58479		1	SHROUD ASSEMBLY - radiator, service with R58288 shroud and 321-3596 decal
2		D31317		2	RACE - lift trunnion
3		R42367		4	GUSSET - trunnion race
4		413-1224		10	BOLT Hex, 3/4"-10 x 1 1/2", G5 - hex, 3/4 NC x 1-1/2 inch
5		R38089		6	CUSHION ASSY. PLUG - rubber
6		R58131		1	COVER - radiator access
7		413-416		2	BOLT Hex, 1/4"-20 x 1", G5 - hex, 1/4 NC x 1 inch
8		492-11025		2	LOCK WASHER 1/4" WASHER, LOCK, 1/4"
9		425-104		2	NUT 1/4"-20, G5 - hex, 1/4 inch NC
10		L102515		1	LATCH FASTENER - access door, radiator
11		70-1108		2	SCREW Slotted Pan Hd, #10-24 x 1/2" - machine, pan head slotted, No. 10 NC x 1/2 inch
12		492-11010		2	LOCK WASHER #10 WASHER, LOCK, #10
13		225-14110		2	NUT #10-24
14		D93753		1	PADLOCK - includes keys
15		R29555		2	KEY - for Master padlock only
15		D93751		2	SET OF 2 KEYS KEY - for Yale padlock only
16		R51465		1	BRACKET BAFFLE - radiator, lower, includes pad
17		R46759		1	PROTECTION STRIP PAD - radiator baffle, upper
18		413-620		4	BOLT Hex, 3/8"-16 x 1 1/4", G5, Full Thd - hex, 3/8 NC x 1-1/4 inch
19		492-11038		4	LOCK WASHER 3/8"
20		425-106		4	NUT 3/8"-16, G5
21		R49206		2	SUPPORT BRACKET - mounting, and brace mounting
22		413-832		4	BOLT Hex, 1/2"-13 x 2", G5 Upper and lower holes Hex, 1/2"-13 x 2", G5
23		413-820		2	BOLT Hex, 1/2"-13 x 1 1/4", G5, Full Thd - hex, 1/2 NC x 1-1/4 inch, Center holes

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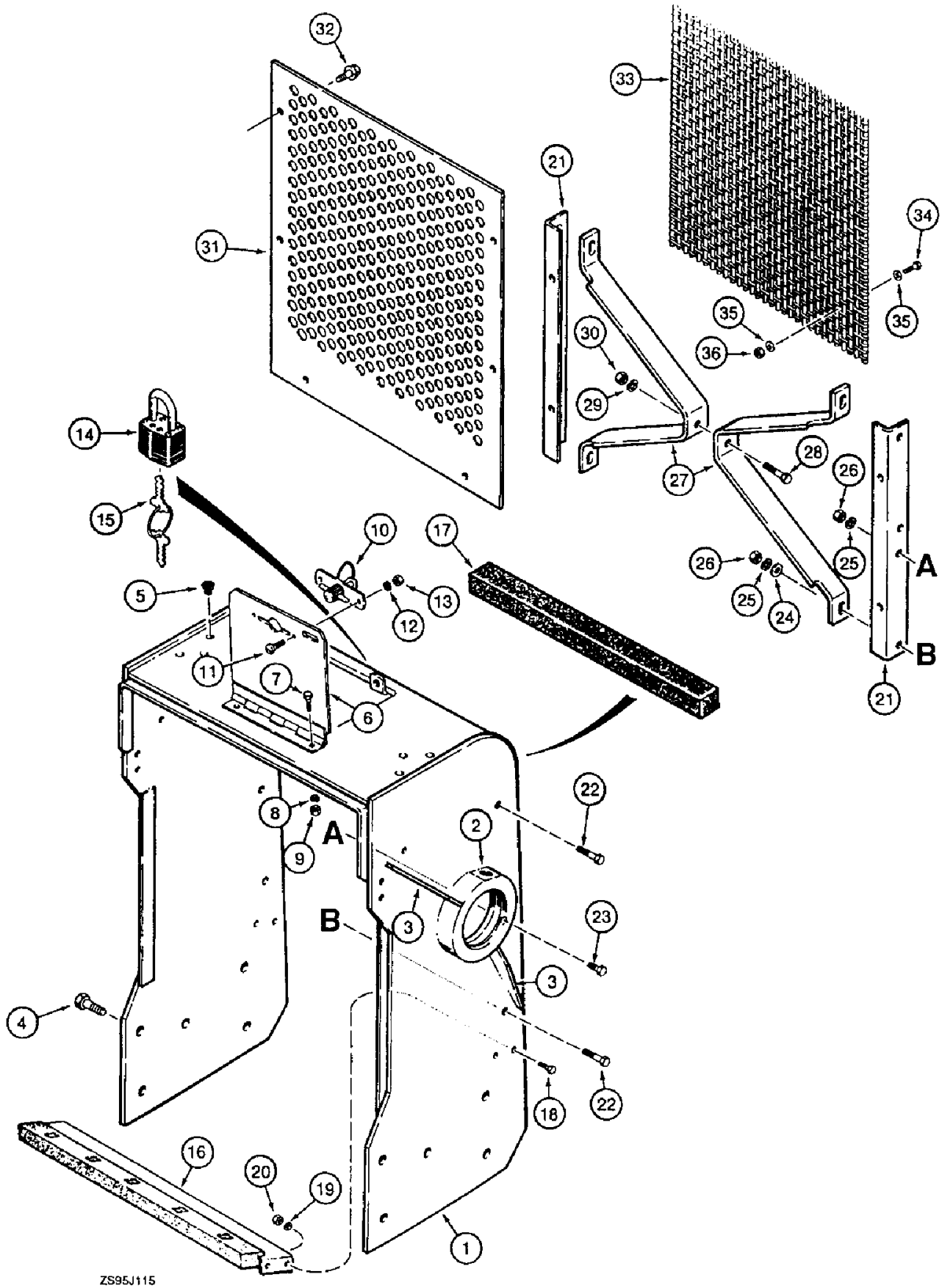
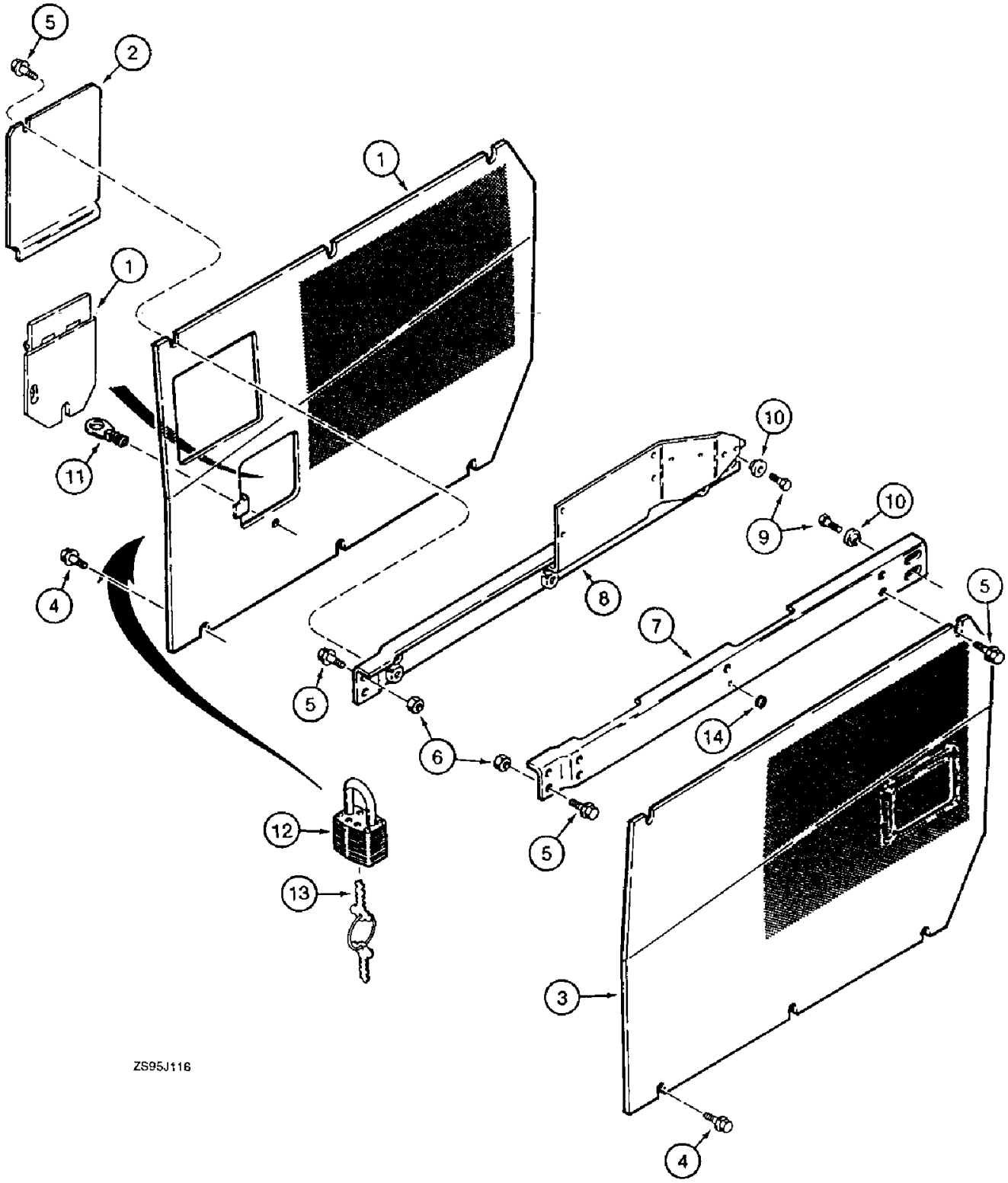
RADIATOR SHROUD, GRILLE, AND SCREEN



RADIATOR SHROUD, GRILLE, AND SCREEN

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
24		495-21056		4	WASHER 1/2" - flat, 9/16 x 1-3/8 x 7/64 inch, upper and lower holes
25		80679		6	LOCK WASHER 1/2" WASHER, LOCK, 1/2"
26		425-108		6	NUT 1/2"-13, G5 NUT, , Hex 1/2"-13, G5
27		R49207		2	SUPPORT BRACE - grille, and shroud support
28		413-1028		1	BOLT Hex, 5/8"-11 x 1 3/4", G5 - hex, 5/8 NC x 1-3/4 inch
29		492-11062		1	LOCK WASHER 5/8" WASHER, LOCK, 5/8"
30		425-1010		1	NUT 5/8"-11, G5
31		R58286		1	GRILLE - radiator brush
32		160-107		6	BOLT Hex Flg, 1/2"-13 x 1 1/4", G8, Full Thd
33		R49212		1	GRILLE ASSY SCREEN - radiator, if used
34		413-624		10	BOLT Hex, 3/8"-16 x 1 1/2", G5 - hex, 3/8 NC x 1-1/2 inch
35		39519		20	WASHER - flat, special, specialb
36		231-4116		10	NUT 3/8"-16, GB NUT - hex, self-locking, 3/8 inch NC
		345-44		UAR	ADHESIVE - spray can, 3M No. 74, 23 ounce, for attaching foam pads to metal surfaces, buy locally

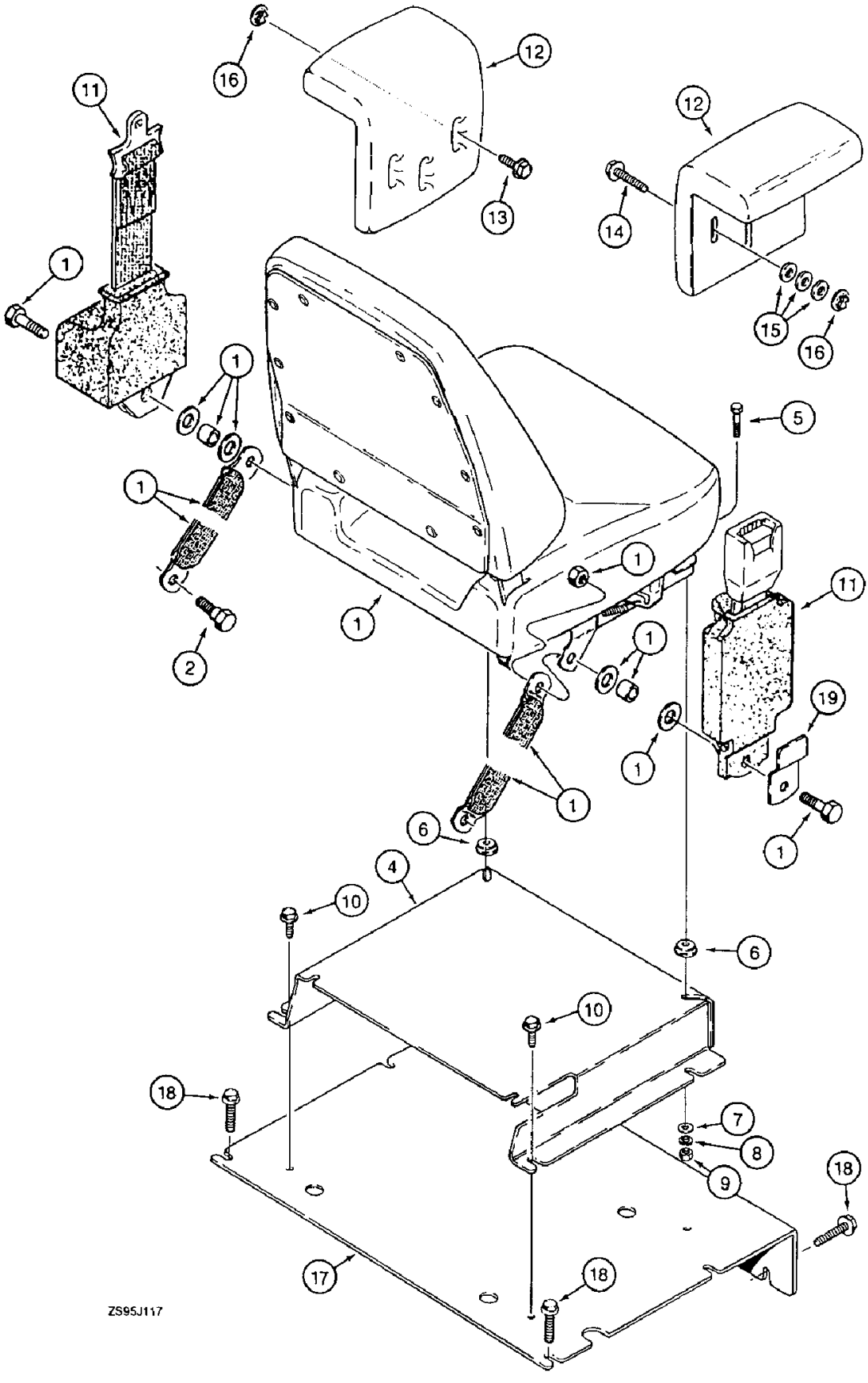
SIDE SHIELDS



SIDE SHIELDS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R48058		1	PANEL SHIELD - engine side, left-hand
2		R48060		1	COVER - left-hand side shield, air cleaner access
3		R48061		1	PANEL SHIELD - engine side, right-hand
4		160-107		6	BOLT Hex Flg, 1/2"-13 x 1 1/4", G8, Full Thd
5		160-106		9	BOLT Hex Flg, 1/2"-13 x 1", G8, Full Thd
6		232-4118		4	NUT 1/2"-13, GC NUT, LOCK, 1/2"-13, GC
7		R51790		1	SUPPORT - side shield, right-hand
8		R53116		1	SUPPORT - side shield, left-hand
9		413-814		4	BOLT Hex, 1/2"-13 x 7/8", G8, Full Thd - hex, 1/2 NC x 7/8 inch
10		R54996		4	SPACER - front mounting holes
11		188029C1		1	LATCH FASTENER - access door
12		D93753		1	PADLOCK - includes keys
13		R29555		2	KEY - for Master padlock only
13		D93751		2	SET OF 2 KEYS KEY - for Yale padlock only
14		A161780		1	BUMPER - rubber, right-hand support only

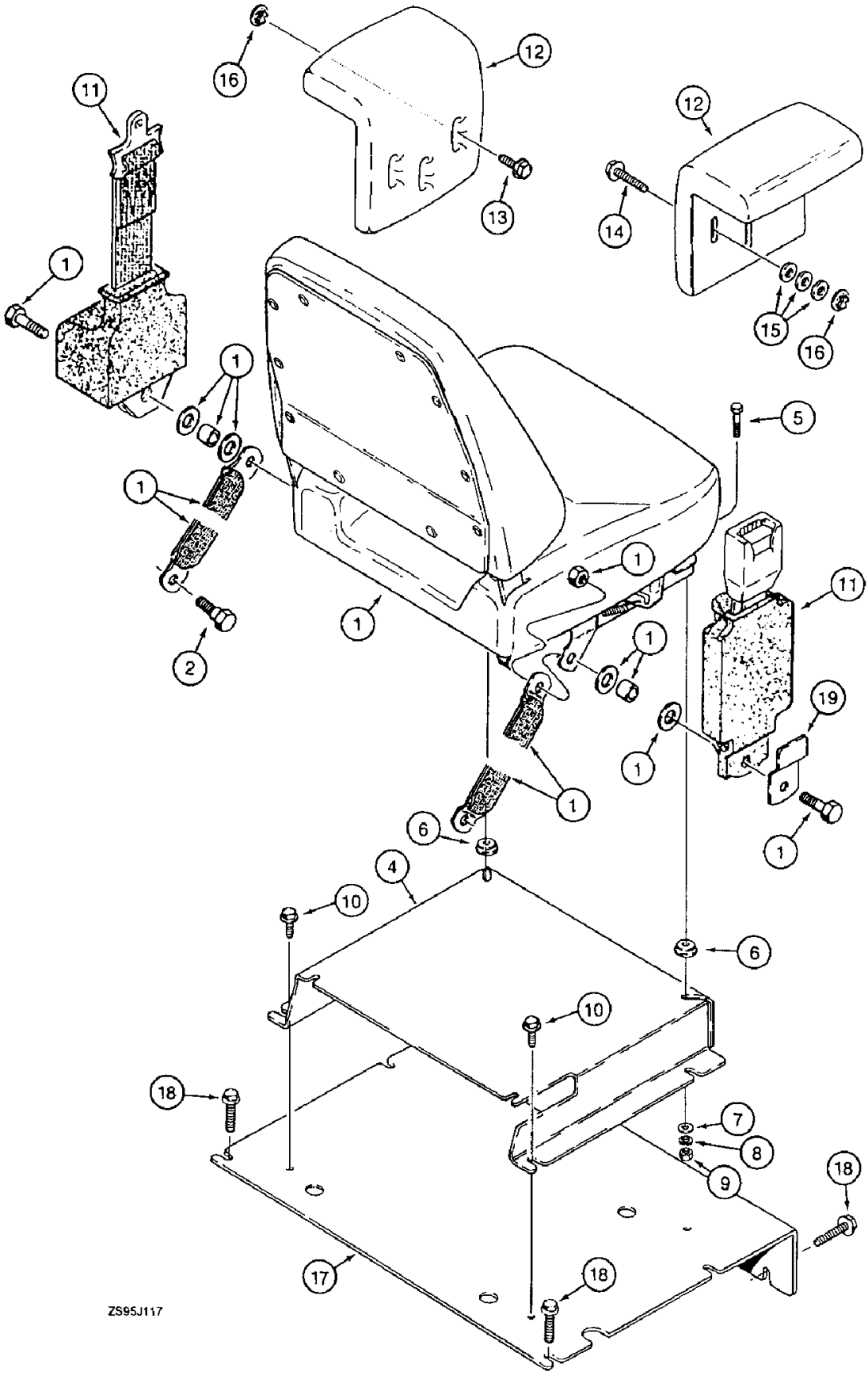
STANDARD SEAT MOUNTING, ARMRESTS, AND SEAT BELT



STANDARD SEAT MOUNTING, ARMRESTS, AND SEAT BELT

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		1990984C1		1	SEAT ASSEMBLY - non-suspension, service replacement, contains additional parts not included in production seat, brown vinyl, parts list figure 9-26
2		F42236		2	STEP BOLT BOLT - shoulder, 7/16 NF x 1-1/4 inch
4		R58831		1	SUPPORT - seat mounting
5		413-520		4	BOLT Hex, 5/16"-18 x 1 1/4", G5 - hex, 5/16 NC x 1-1/4 inch
6		A45111		2	SPACER - cupped, front only
7		495-11034		4	WASHER 5/16", SAE 5/16" SAE (flat, 11/32 x 11/16 x 1/16")
8		492-11031		4	LOCK WASHER 5/16" WASHER, LOCK, 5/16"
9		425-105		4	NUT 5/16"-18, G5
10		160-102		4	BOLT Hex Flg, 3/8"-16 x 1", G8, Full Thd
11		D150377		1	SAFETY BELT 2.00" W Retractable, If used 2.00" W
11		R58418		1	SAFETY BELT 3.00" W Retractable, If used 3.00" W
12		R58336		2	ARMREST - cushion - Brown NLA
13		160-102		3	BOLT Hex Flg, 3/8"-16 x 1", G8, Full Thd
14		160-103		3	BOLT Hex Flg, 3/8"-16 x 1 1/4", G8, Full Thd
15		496-21041		9	WASHER 13/32" x 13/16" x .089", HDN - flat, 13/32 x 13/16 x 3/32", hardened, Used with item 14 bolt only, right-hand side, 3 used between armrest and each mounting location on hydraulic tank
16		131-415		6	JAM NUT Push, Bolt Retainer, 3/8" x 25/32"
17		R58717		1	PLATE SUPPORT - seat mounting, at seat and tank frame
18		160-106		6	BOLT Hex Flg, 1/2"-13 x 1", G8, Full Thd

STANDARD SEAT MOUNTING, ARMRESTS, AND SEAT BELT



STANDARD SEAT MOUNTING, ARMRESTS, AND SEAT BELT

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
19		D150393		1	BRACKET - inner support used with D150377

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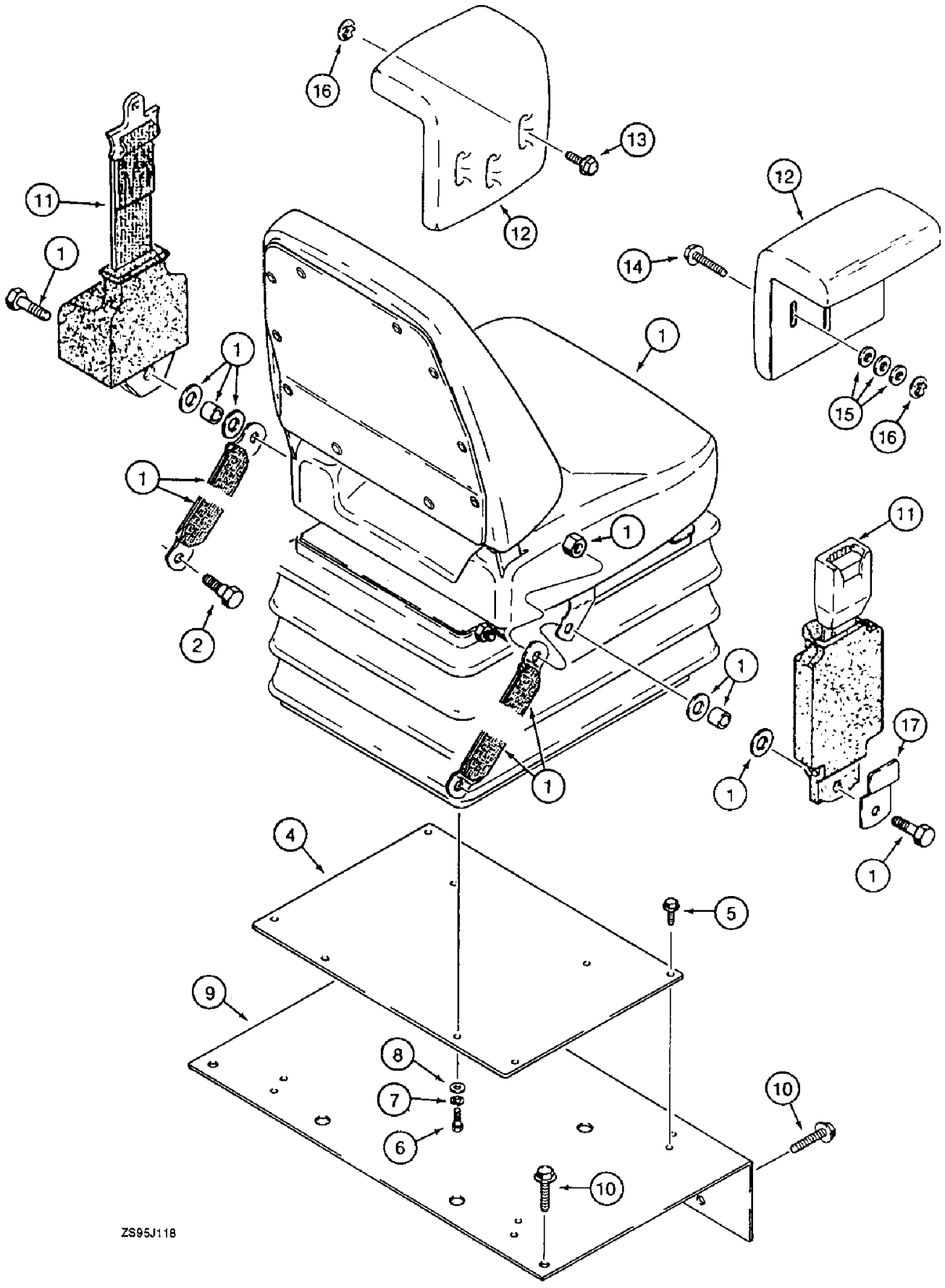
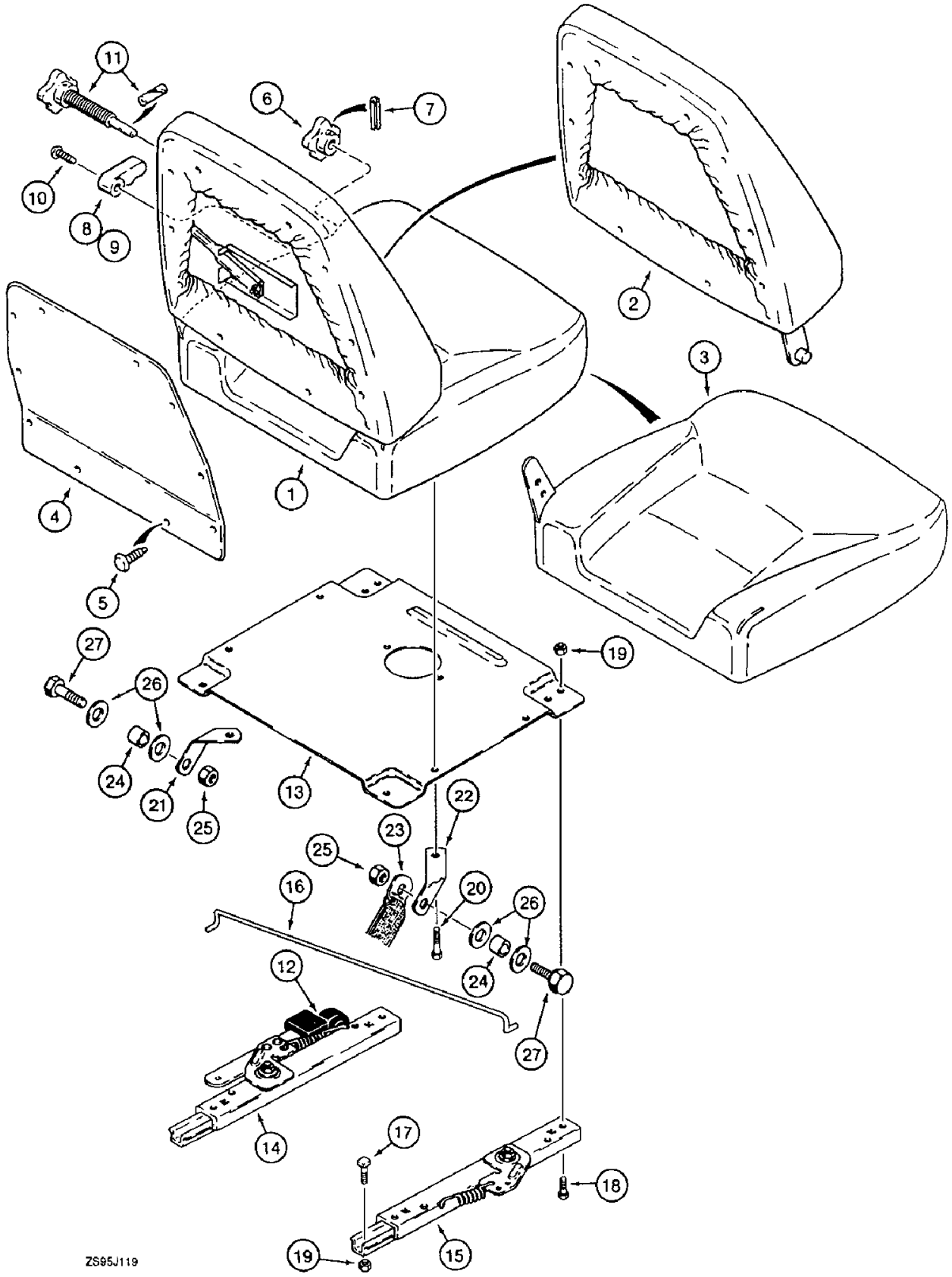
SUSPENSION SEAT MOUNTING, ARMRESTS, AND SEAT BELT



SUSPENSION SEAT MOUNTING, ARMRESTS, AND SEAT BELT

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		1340220C2		1	SEAT ASSY. SEAT ASSEMBLY - suspension, brown, parts list figures 9-28 - 9-32
2		F42236		2	STEP BOLT BOLT - shoulder, 7/16 NF x 1-1/4 inch
4		R58675		1	LARGE PLATE PLATE - seat mounting
5		160-102		4	BOLT Hex Flg, 3/8"-16 x 1", G8, Full Thd
6		614-8025		4	BOLT Hex, M8 x 25, 8.8 - hex, full threads, 8 - 1.25 x 25 mm
7		892-11008		4	LOCK WASHER M8 WASHER, LOCK, M8
8		895-11008		4	WASHER M8 x 16 x 1.6 - flat, 9 x 17 x 1.6 mm
9		R58717		1	PLATE SUPPORT - seat mounting plate, at seat and tank frame
10		160-106		6	BOLT Hex Flg, 1/2"-13 x 1", G8, Full Thd - hex flange, 1/2 NC x 1-1/4 inch, grade 8
11		D150377		1	SAFETY BELT 2.00" W Retractable, If used 2.00" W
11		R58418		1	SAFETY BELT 3.00" W Retractable, If used 3.00" W
12		R58336		2	ARMREST - cushion - Brown NLA
13		160-102		3	BOLT Hex Flg, 3/8"-16 x 1", G8, Full Thd
14		160-103		3	BOLT Hex Flg, 3/8"-16 x 1 1/4", G8, Full Thd
15		496-21041		9	WASHER 13/32" x 13/16" x .089", HDN - flat, 13/32 x 13/16 x 3/32", hardened, Used with item 14 bolt only, right-hand side, 3 used between armrest and each mounting location on hydraulic tank
16		131-415		6	JAM NUT Push, Bolt Retainer, 3/8" x 25/32"
17		D150393		1	BRACKET - inner support, used with D150377

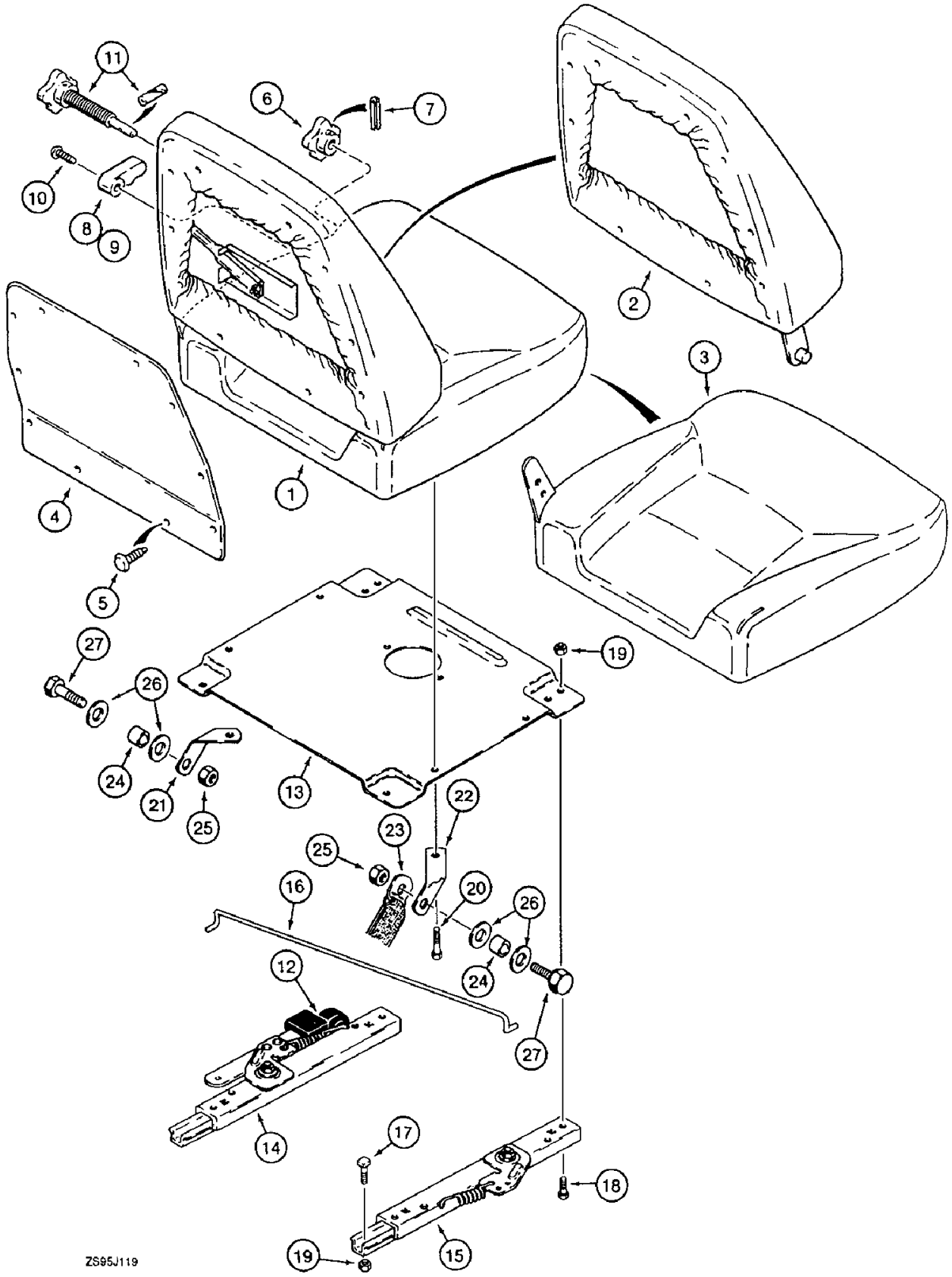
SEAT ASSEMBLY, WITHOUT SUSPENSION



SEAT ASSEMBLY, WITHOUT SUSPENSION

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		1990984C1		1	SEAT ASSEMBLY - non-suspension, brown, service replacement, contains additional parts not included in production seat
1		1999727C3		1	SEAT ASSY. CUSHION ASSEMBLY - seat backrest, with frame, brown
2		138365A1		1	FRAME ASSY CUSHION - backrest, with frame, brown
2A		1999729C1		1	BACKREST COVER PAD - backrest, with vinyl cover, not shown
3		138366A1			FRAME ASSY CUSHION - seat, with frame, brown
3A		1999728C1		1	CUSHION PAD - seat cushion, with vinyl cover, not shown
3B		141566A1		1	LARGE PLATE PLATE - reinforcement, seat frame to backrest frame, left hand, if used, not shown
4		1981820C2		1	PACKAGE, REPAIR KIT - backrest cover
5		1999693C1		1	KIT CLIP - christmas tree, package of 14
		1999691C1		1	PACKAGE,SERVICE KIT - seat knob
6		NSS		1	NOT SERVICED SEPARATELY KNOB - lumbar adjustment
7		38-31016		2	PIN 5/32" x 1", Coiled
8		NSS		1	NOT SERVICED SEPARATELY KNOB - back tilt cover
9		NSS		1	NOT SERVICED SEPARATELY HANDLE - recline
10		NSS		1	NOT SERVICED SEPARATELY SCREW - special
11		NSS		1	NOT SERVICED SEPARATELY KNOB - seat cushion tilt
12		NSS		1	NOT SERVICED SEPARATELY KNOB - fore / aft
13		182991A1		1	LARGE PLATE PLATE - adapter, replaces 136316A1
		1344248C1		1	SLIDE KIT - double locking slide

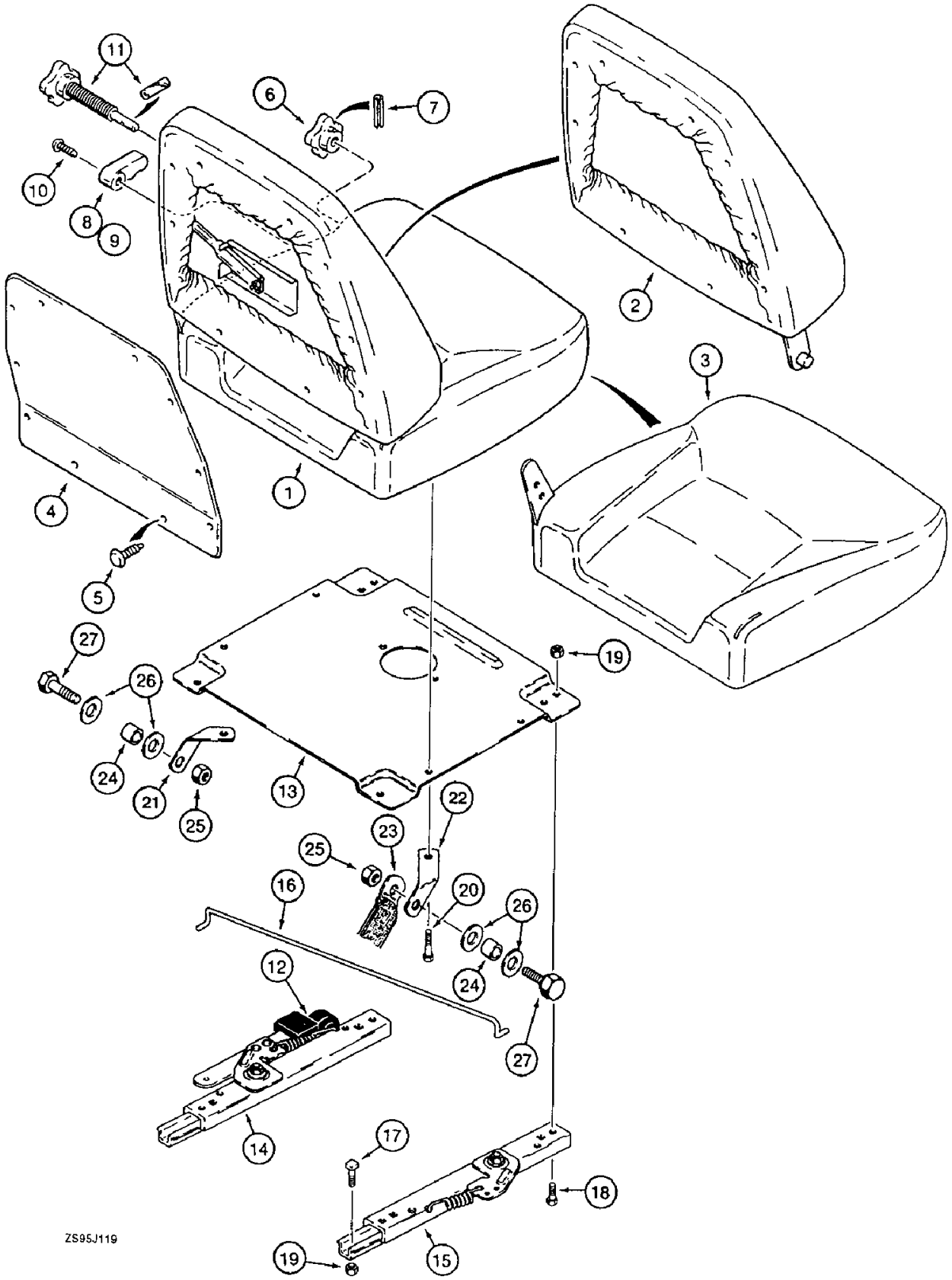
SEAT ASSEMBLY, WITHOUT SUSPENSION



SEAT ASSEMBLY, WITHOUT SUSPENSION

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
14		NSS		1	NOT SERVICED SEPARATELY SLIDE - locking seat, with handle
15		NSS		1	NOT SERVICED SEPARATELY SLIDE - locking
16		NSS		1	NOT SERVICED SEPARATELY WIRE - slide latch
17		417-512		4	BOLT Sq Hd, 5/16"-18 x 3/4", G2 - square head, 5/16 NC x 3/4 inch, grade 2
18		413-512		4	BOLT Hex, 5/16"-18 x 3/4", G5, Full Thd - hex, 5/16 NC x 3/4 inch
19		230-4225		8	LOCK NUT 5/16"-18, GA NUT - hex, self-locking, 5/16 inch NC
20		413-528		4	BOLT Hex, 5/16"-18 x 1 3/4", G5
		1999806C1		1	KIT - tether
21		NSS		1	NOT SERVICED SEPARATELY BRACKET - mounting, left-hand
22		NSS		1	NOT SERVICED SEPARATELY BRACKET - mounting, right-hand
23		R57317		2	SAFETY BELT 1.80" W x 10.50" L Strap 1.80" W x 10.50" L
24		NSS		2	NOT SERVICED SEPARATELY SPACER - tether
25		232-4117		2	LOCK NUT 7/16"-14, GC NUT, LOCK, 7/16"-14, GC
26		495-21063		4	WASHER 9/16" - flat, 5/8 x 1-15/32 x 7/64 inch
27		328-732		2	BOLT Hex, 7/16"-20 x 2", G8

SEAT ASSEMBLY, WITH SUSPENSION



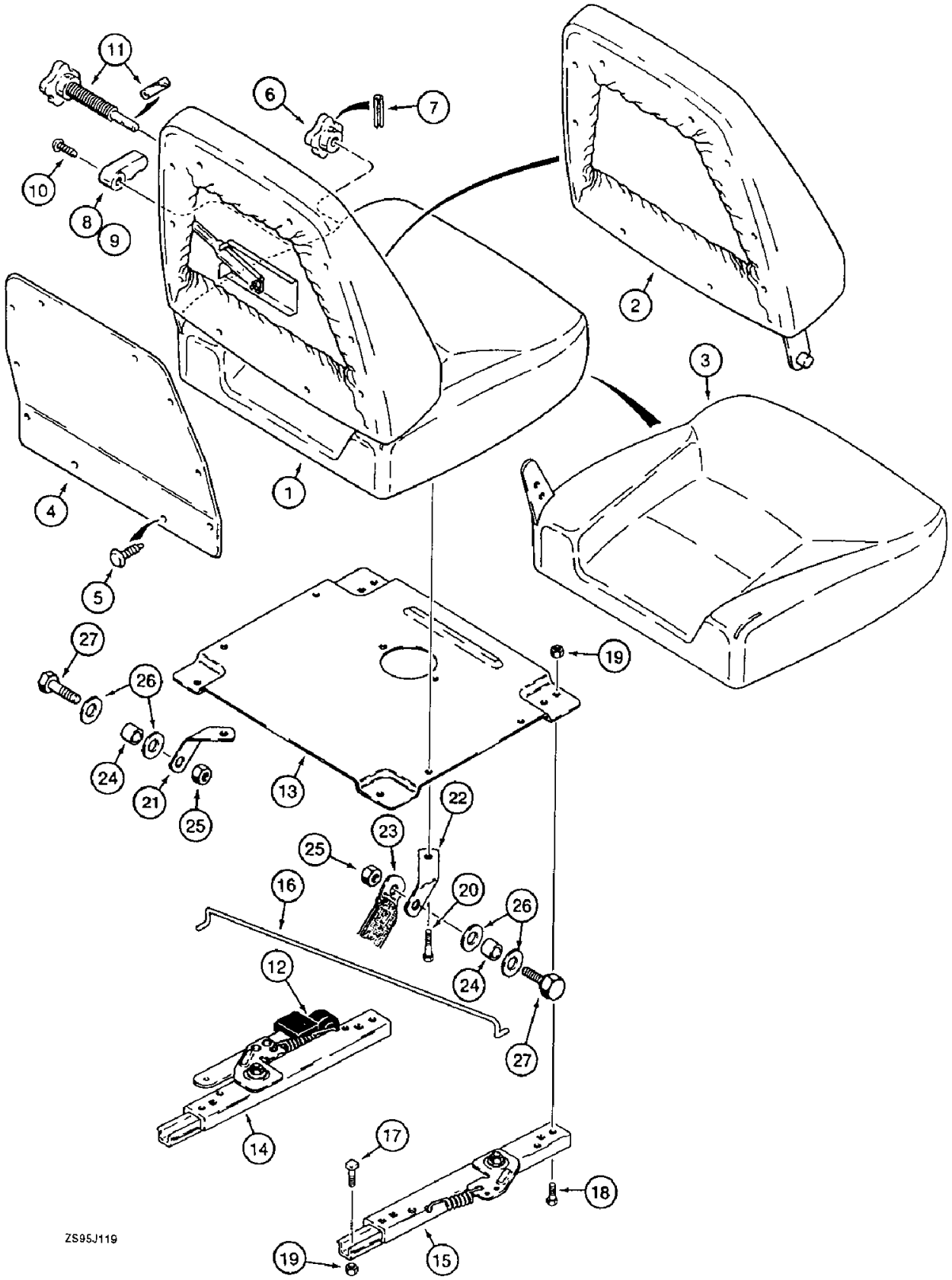
SEAT ASSEMBLY, WITH SUSPENSION

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		1340220C2		1	SEAT ASSY. SEAT ASSEMBLY - suspension, brown, also includes parts on figure 9-30
1		1999727C3		1	SEAT ASSY. CUSHION ASSEMBLY - seat and backrest, with frame, brown
2	1	138365A1		1	FRAME ASSY CUSHION - backrest, with frame, brown
2A	2	1999729C1		1	BACKREST COVER PAD - backrest, with vinyl cover, not shown
3		138366A1			FRAME ASSY CUSHION - seat, with frame, brown
3A		1999728C1		1	CUSHION PAD - seat cushion, with vinyl cover, not shown
3B		141566A1		1	LARGE PLATE PLATE - reinforcement, seat frame to backrest frame, left hand, if used, not shown
4		1981820C2		1	PACKAGE, REPAIR KIT - backrest cover
5		1999693C1		1	KIT CLIP - christmas tree, package of 14
		1999691C1		1	PACKAGE,SERVICE KIT - seat knob
6		NSS		1	NOT SERVICED SEPARATELY KNOB - lumbar adjustment
7		38-31016		2	PIN 5/32" x 1", Coiled
8		NSS		1	NOT SERVICED SEPARATELY KNOB - back tilt cover
9		NSS		1	NOT SERVICED SEPARATELY HANDLE - recline
10		NSS		1	NOT SERVICED SEPARATELY SCREW - special
11		NSS		1	NOT SERVICED SEPARATELY KNOB - seat cushion tilt
12		NSS		1	NOT SERVICED SEPARATELY KNOB - fore / aft
13		182991A1		1	LARGE PLATE PLATE - adapter, replaces 136316A1
		1344248C1		1	SLIDE KIT - double locking slide

(1) Ref #2 & #3 have internal frame

(2) Ref #2A & #3A have no internal frame

SEAT ASSEMBLY, WITH SUSPENSION



SEAT ASSEMBLY, WITH SUSPENSION

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
14		NSS		1	NOT SERVICED SEPARATELY SLIDE - locking seat, with handle
15		NSS		1	NOT SERVICED SEPARATELY SLIDE - locking
16		NSS		1	NOT SERVICED SEPARATELY WIRE - slide latch
17		417-512		4	BOLT Sq Hd, 5/16"-18 x 3/4", G2 - square head, 5/16 NC x 3/4 inch, grade 2
18		413-512		4	BOLT Hex, 5/16"-18 x 3/4", G5, Full Thd - hex, 5/16 NC x 3/4 inch
19		230-4225		8	LOCK NUT 5/16"-18, GA NUT - hex, self-locking, 5/16 inch NC
20		413-528		4	BOLT Hex, 5/16"-18 x 1 3/4", G5
	1	1999806C1		1	KIT - tether
21		NSS		1	NOT SERVICED SEPARATELY BRACKET - mounting, left-hand
22		NSS		1	NOT SERVICED SEPARATELY BRACKET - mounting, right-hand
23		R57317		2	SAFETY BELT 1.80" W x 10.50" L Strap 1.80" W x 10.50" L
24		NSS		2	NOT SERVICED SEPARATELY SPACER - tether
25		232-4117		2	LOCK NUT 7/16"-14, GC NUT, LOCK, 7/16"-14, GC
26		495-21063		4	WASHER 9/16" - flat, 5/8 x 1-15/32 x 7/64 inch
27		328-732		2	BOLT Hex, 7/16"-20 x 2", G8

(1) REF 21 THRU 27 (KIT# 1999806C1) ARE NOT INCLUDED WITH SEAT ASSY PER PRINT REVISION D. 11/23/98

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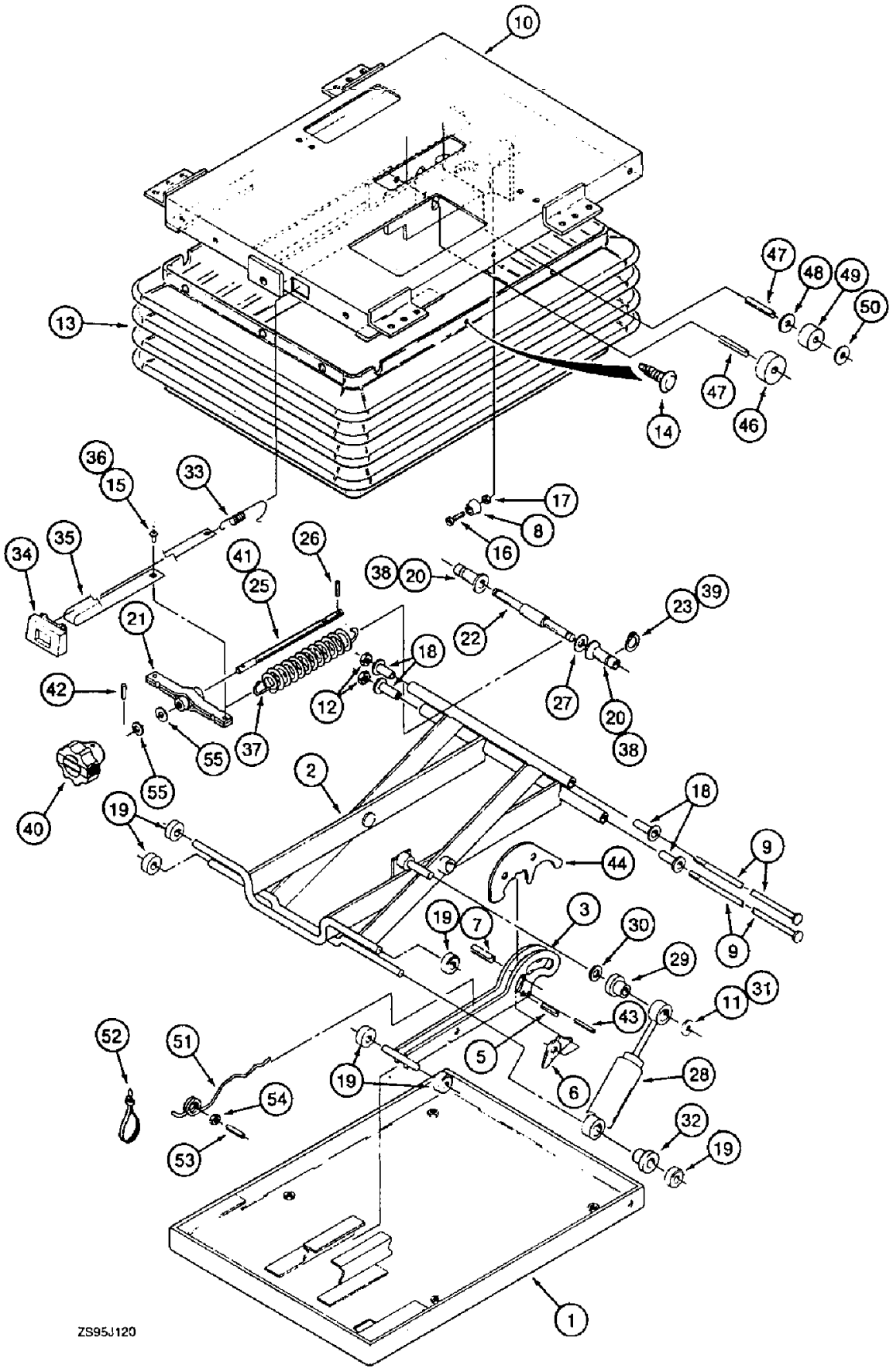
SEAT ASSEMBLY, WITH SUSPENSION



SEAT ASSEMBLY, WITH SUSPENSION

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
		1340220C2		1	SEAT ASSY. SEAT ASSEMBLY - suspension, brown, also includes parts on figures 9-28
		1981819C2		1	PACKAGE KIT - seat suspension
1		1981787C1		1	CASE HOUSING - lower
2		1981789C1		1	DIPPER ARM - suspension
		119001A1		1	ARMREST ASSY. ARM ASSEBLY - cam
3		1981792C1		1	ARM - mounting
4		NSS		1	NOT SERVICED SEPARATELY RIVET - solid, 5/32 x 7/8 inch, not shown
5		NSS		1	NOT SERVICED SEPARATELY PIN - grooved, 7/32 x 3/4 inch
6		1981801C1		1	LATCH - seat
7		NSS		1	NOT SERVICED SEPARATELY PIN - roll, 3/16 x 3/4 inch
8		1981793C1		2	BUMPER - seat
9		A49529		2	SHAFT - bushing tube
10		1981821C1		1	HOUSING - upper
11		131-425		2	JAM NUT Push, 1/2" NUT, LOCK, Push, 1/2"
12		230-4216		2	LOCK NUT 3/8"-16, GA NUT - hex, self-locking, 3/8 inch NC
		1981786C1		1	KIT - boot, suspension
13		NSS		1	NOT SERVICED SEPARATELY BOOT - suspension
14		700709502		1	FASTENER PIN - retaining, package of 24
15		151-537		1	RIVET Pop, 1/8" x .650" - break mandrel, 1/8 x 5/8 inch
16		440-11010		2	SCREW Cross Pan Hd, #10-24 x 5/8" - machine, pan Phillips, No. 10 NC x 5/8 inch
17		230-42409		2	NUT #10-24, GA NUT - hex, self-locking, No. 10 NC
		1344249C1		1	ROLLER ASSY. KIT - roller tube and bearing
18		NSS		4	NOT SERVICED SEPARATELY TUBE - roller, suspension

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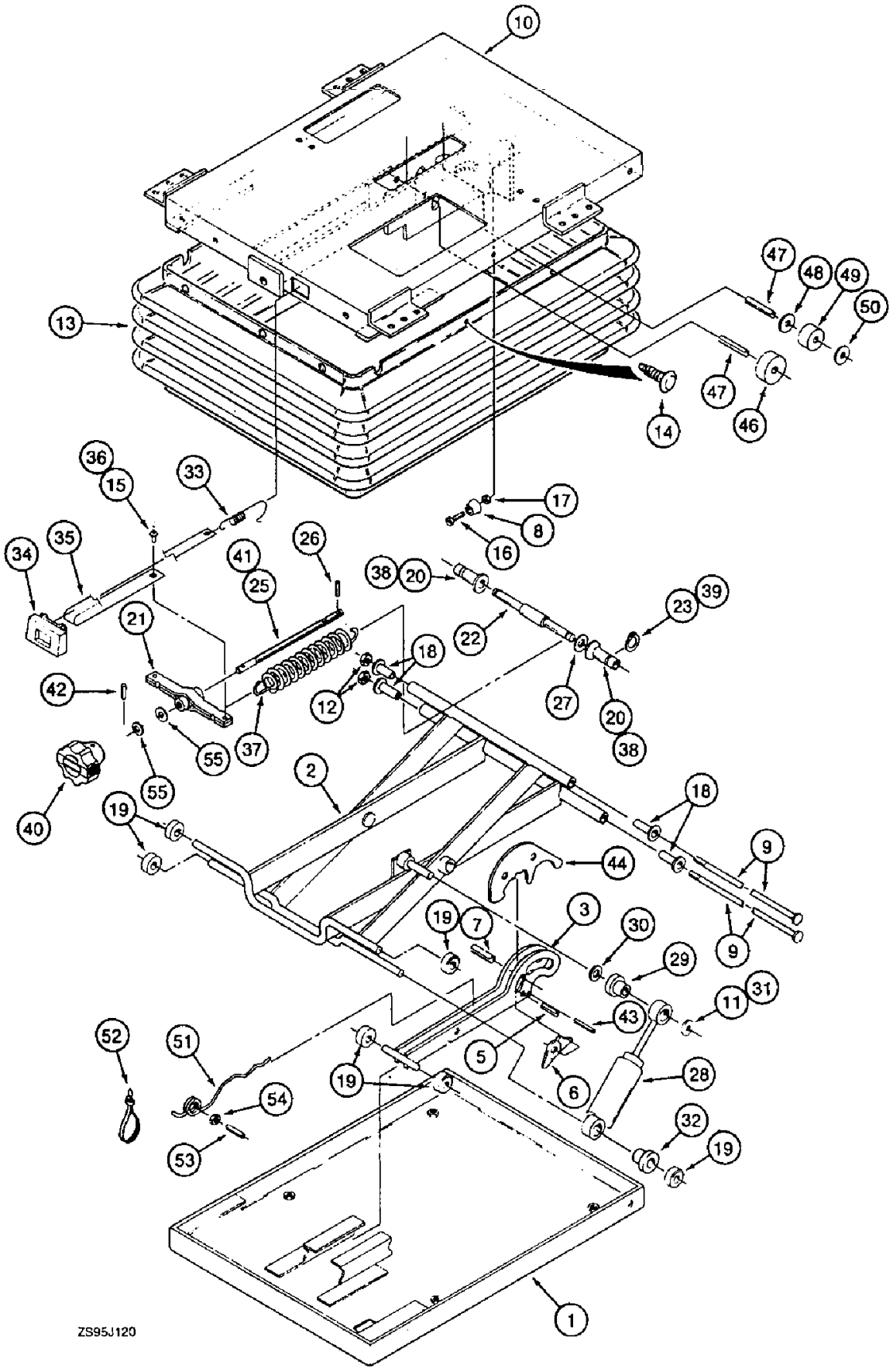
SEAT ASSEMBLY, WITH SUSPENSION



SEAT ASSEMBLY, WITH SUSPENSION

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
19		NSS		6	NOT SERVICED SEPARATELY BEARING - tube
		1987116C2		1	PACKAGE KIT - weight adjustment
20		NSS		2	NOT SERVICED SEPARATELY BUSHING - spring
21		NSS		1	NOT SERVICED SEPARATELY BAR - weight adjustment
22		128115A1		1	SHAFT - spring
23		NSS		2	NOT SERVICED SEPARATELY RING - retaining
24		NSS		1	NOT SERVICED SEPARATELY NUT - adjusting
25		NSS		1	NOT SERVICED SEPARATELY SHAFT - weight adjusting
26		NSS		1	NOT SERVICED SEPARATELY PIN - roll
27		NSS		1	NOT SERVICED SEPARATELY SPACER - weight adjusting
		1344250C2		1	KIT - shock absorber
28		1343998C1		1	KIT ABSORBER - shock, seat
29		A45501		2	BUSHING 0.504" ID x 0.87" OD x 1.417" BEARING - shock absorber, upper
30		A45519		1	WASHER - flat, plastic, special, 33/64 x 1-1/8 x 1/16 inch
31		131-425		2	JAM NUT Push, 1/2" NUT, LOCK, Push, 1/2"
32		NSS		1	NOT SERVICED SEPARATELY BEARING - suspension shock absorber, lower
		1999901C2		1	PACKAGE KIT - weight adjusting guide
33		NSS		1	NOT SERVICED SEPARATELY SPRING - height adjustment
34		NSS		1	NOT SERVICED SEPARATELY GUIDE - weight adjustment
35		NSS		1	NOT SERVICED SEPARATELY TAPE - weight adjustment
36		151-537		1	RIVET Pop, 1/8" x .650" - break mandrel, 1/8 x 5/8 inch
		123968A1		1	PACKAGE KIT - weight adjustment
37		NSS		1	NOT SERVICED SEPARATELY SPRING - extension

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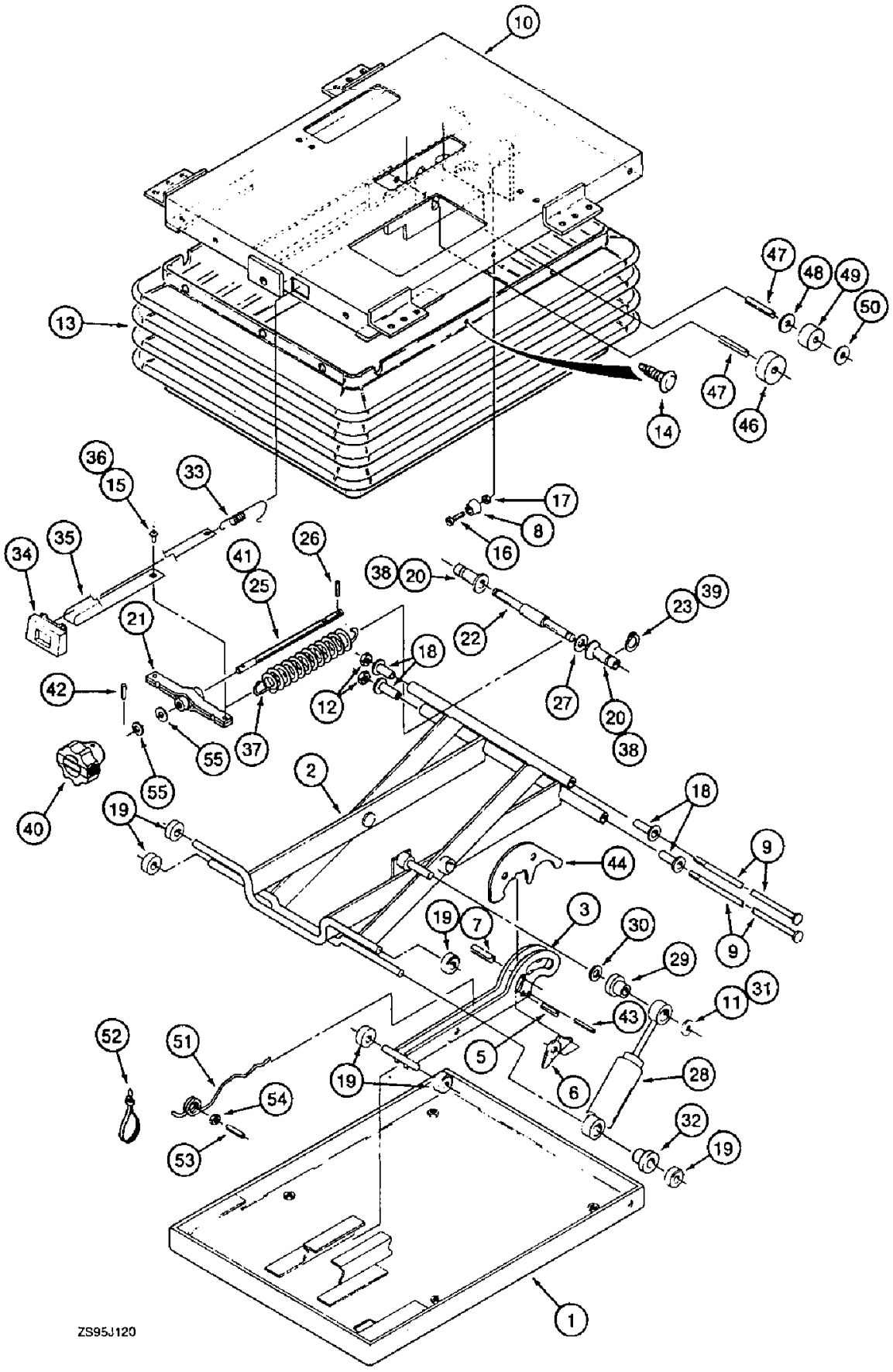
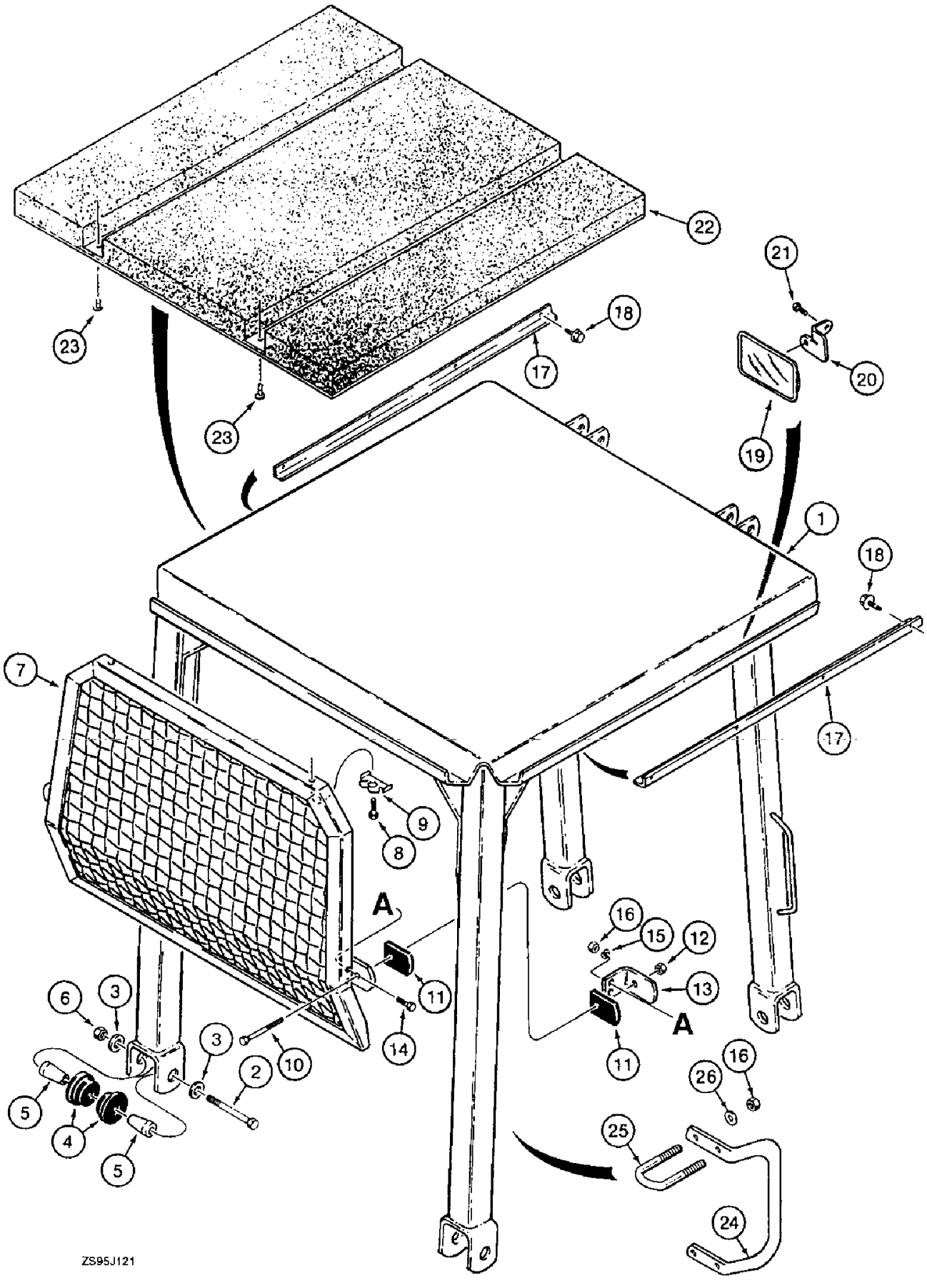
SEAT ASSEMBLY, WITH SUSPENSION



SEAT ASSEMBLY, WITH SUSPENSION

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
38		NSS		2	NOT SERVICED SEPARATELY SPRING - bushing
39		NSS		2	NOT SERVICED SEPARATELY RING - retaining
		{}		1	KIT - knob and shaft assembly
40		118578C1		1	BUTTON KNOB ASSEMBLY - weight adjusting, includes handle and decals, which are not serviced separately
41		NSS		1	NOT SERVICED SEPARATELY SHAFT - weight adjusting
42		NSS		1	NOT SERVICED SEPARATELY PIN - roll
		123967A1		1	PACKAGE KIT - cam follower
43		NSS		1	NOT SERVICED SEPARATELY PIN - cam follower
44		1981799C1		1	BEARING, NEEDLE CAM - low profile
45		NSS		2	NOT SERVICED SEPARATELY RING - retaining, not shown
46		1981796C1		1	BEARING, NEEDLE BEARING - cam follower
47		NSS		2	NOT SERVICED SEPARATELY PIN - cam follower
48		1981796C1		1	BEARING, NEEDLE BEARING - cam follower
49		700712454		2	SPACER - cam
50		NSS		4	NOT SERVICED SEPARATELY RING - retaining
		123966A1		1	PACKAGE KIT - height adjustment
51		NSS		1	NOT SERVICED SEPARATELY SPRING - height adjustment
52		L18337		1	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon
53		NSS		1	NOT SERVICED SEPARATELY PIN - roll
54		NSS		1	NOT SERVICED SEPARATELY SPACER - spring
55		495-11034		2	WASHER 5/16", SAE 5/16" SAE (flat, 11/32 x 11/16 x 1/16")

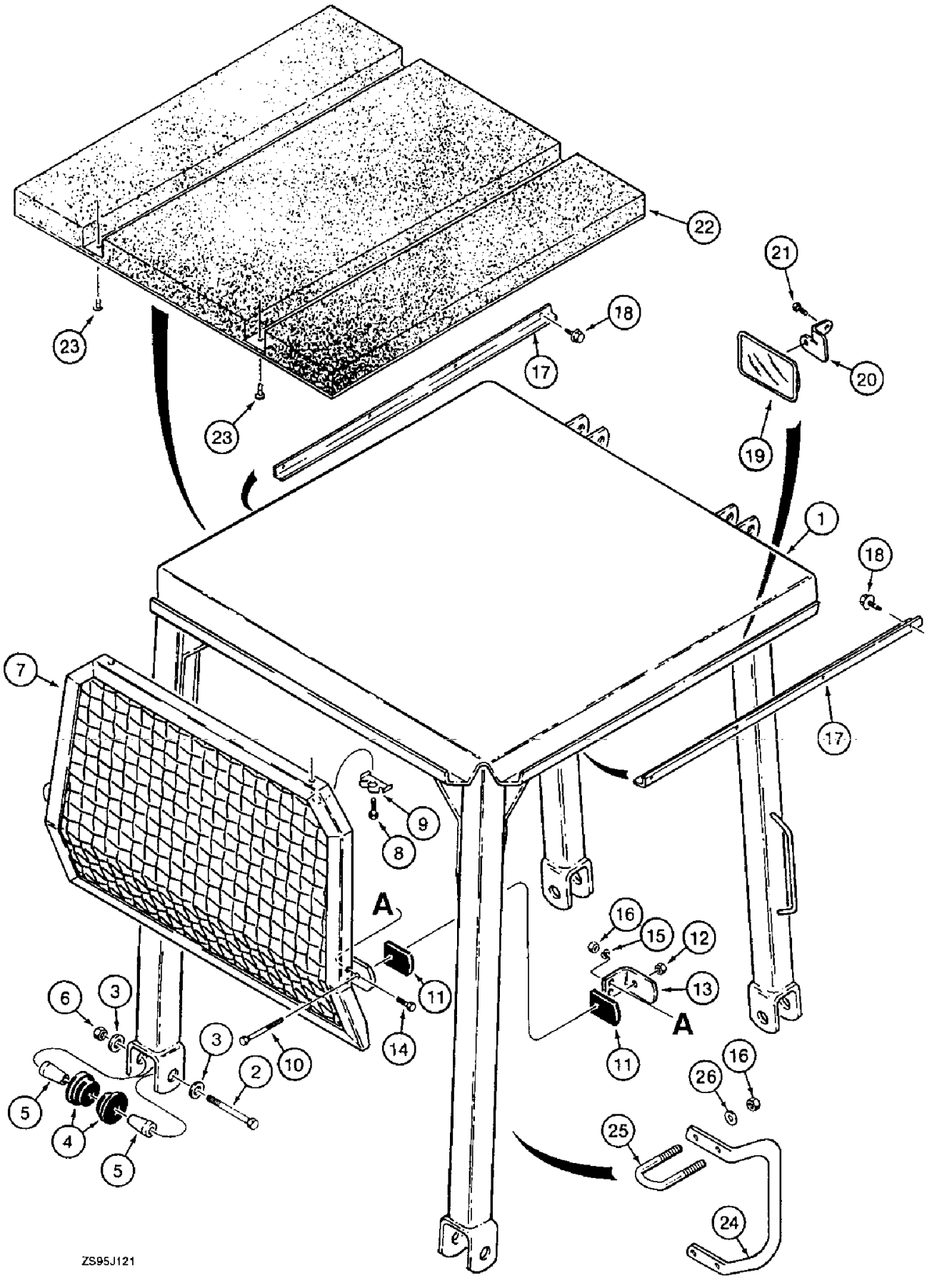
ROLLOVER PROTECTIVE STRUCTURE, CANOPY



ROLLOVER PROTECTIVE STRUCTURE, CANOPY

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R58392		1	ROPS CANOPY - ROPS
2		413-1296		4	BOLT Hex, 3/4"-10 x 6", G5 - hex, 3/4 NC x 6 inch
3		T53681		8	WASHER - flat, special
4		F44212		8	MOUNTING PARTS INSULATOR - rubber
5		F44211		8	BUSHING - insert
6		232-41112		4	NUT 3/4"-10, GC NUT, LOCK, 3/4"-10, GC
7		R48279		1	GUARD SCREEN - rear
8		413-824		2	BOLT Hex, 1/2"-13 x 1 1/2", G5, Full Thd
9		R38226		2	LOCK WASHER - special tab locking
10		413-880		2	BOLT Hex, 1/2"-13 x 5", G5 - hex, 1/2 NC x 5 inch
11		R40074		4	CUSHION ASSY. CUSHION - rubber, screen, mounting
12		231-1448		2	NUT 1/2"-13, GB - hex, self-locking, 1/2 inch NC
13		R40921		2	CLAMP - rear screen
14		413-616		4	BOLT Hex, 3/8"-16 x 1", G5, Full Thd - hex, 3/8 NC x 1 inch
15		492-11038		4	LOCK WASHER 3/8"
16		425-106		12	NUT 3/8"-16, G5
17		R58402		2	ANGLE BAR BRACKET - headliner retaining
18		281-18712		8	SELF-TAP SCREW Hex Wash Hd, 1/4" x 3/4" SCREW - self-tapping, hex washer head, 1/4 NC x 3/4 inch
19		L74714		1	MIRROR - rear view, includes mounting hardware
20		101800A1		1	BRACKET - mirror mounting
21		160-100		1	BOLT Hex Flg, 3/8"-16 x 5/8", G8, Full Thd Use with Loctite 242 Hex Flg, 3/8"-16 x 5/8", G8, Full Thd
22		R48301		1	NOISE PROTECTION HEADLINER - ROPS canopy roof, vinyl covered

ROLLOVER PROTECTIVE STRUCTURE, CANOPY



ROLLOVER PROTECTIVE STRUCTURE, CANOPY

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
23		151-706		8	CLIP Rd 7/8" Hd, 1/4" Hole RETAINER - black, plastic, 1/4 hole size x 7/8 inch head dia, used as retainer for ROPS canopy headliner
24		108453A1		2	HANDLE - grab, wide track units only
25		110435A1		4	U-BOLT - 3/8 inch
26		496-21041		8	WASHER 13/32" x 13/16" x .089", HDN - flat, 13/32 x 13/16 x 3/32", hardened
		345-44		UAR	ADHESIVE - spray can, 3M No. 74, 23 ounce, buy locally

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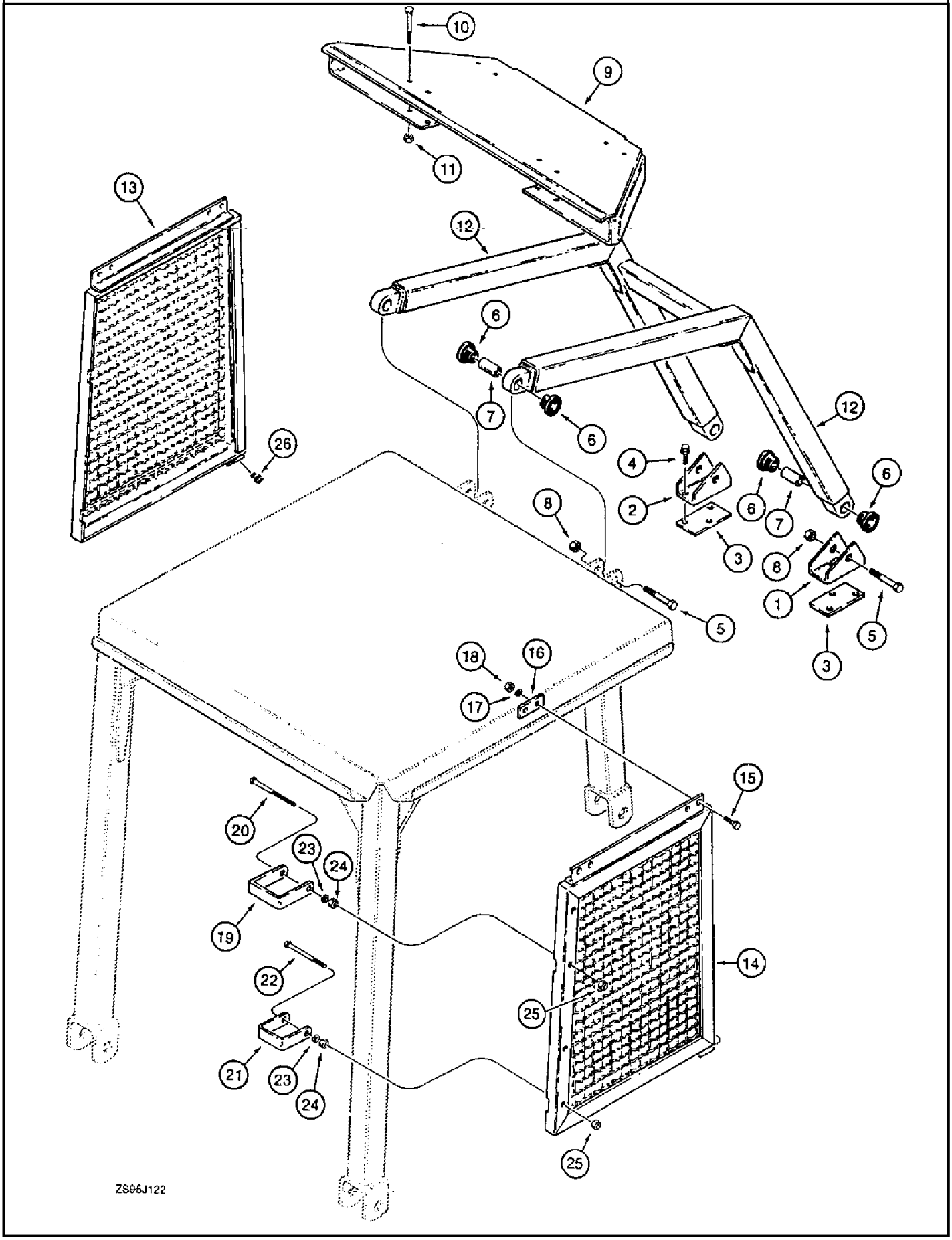
CANOPY SCREENS AND BRUSH GUARD



CANOPY SCREENS AND BRUSH GUARD

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
1		R40732		1	BRACKET - right hand
2		R40733		1	BRACKET - left hand
3		R41001		2	LARGE PLATE PLATE - retaining, bracket
4		160-107		6	BOLT Hex Flg, 1/2"-13 x 1 1/4", G8, Full Thd
5		413-1264		4	BOLT Hex, 3/4"-10 x 4", G5 - hex, 3/4 NC x 4 inch
6		R40721		8	GROMMET INSULATOR - rubber
7		R40954		4	BUSHING - brush guard mounting
8		232-41112		4	NUT 3/4"-10, GC NUT, LOCK, 3/4"-10, GC
9		R48972		1	DEFLECTOR EXTENSION - canopy
10		411-864		8	CARRIAGE BOLT Short NK, 1/2"-13 x 4", G2 BOLT - carriage, 1/2 NC x 4 inch
11		231-1448		8	NUT 1/2"-13, GB - hex, self-locking, 1/2 inch NC
12		R40743		1	GUARD - brush
13		101183A1		1	SCREEN - side, left-hand
14		101184A1		1	SCREEN - side, right-hand
15		413-820		8	BOLT Hex, 1/2"-13 x 1 1/4", G5, Full Thd - hex, 1/2 NC x 1-1/4 inch
16		F44446		4	NOZZLE HOLDER SPACER - upper, side screen
17		80679		8	LOCK WASHER 1/2" WASHER, LOCK, 1/2"
18		425-108		8	NUT 1/2"-13, G5 NUT, , Hex 1/2"-13, G5
19		R50365		2	CLAMP - side screen, rear, upper
20		113-443		2	BOLT Hex, 1/2"-13 x 6 1/2", G5 3-1/2 inch thread length Hex, 1/2"-13 x 6 1/2", G5
21		F43788		2	CLAMP - rear, lower
22		113-2434		2	BOLT Hex, 1/2"-13 x 6", G5 2-1/2 inch thread length Hex, 1/2"-13 x 6", G5
23		80679		4	LOCK WASHER 1/2" WASHER, LOCK, 1/2"
24		425-108		4	NUT 1/2"-13, G5 NUT, , Hex 1/2"-13, G5

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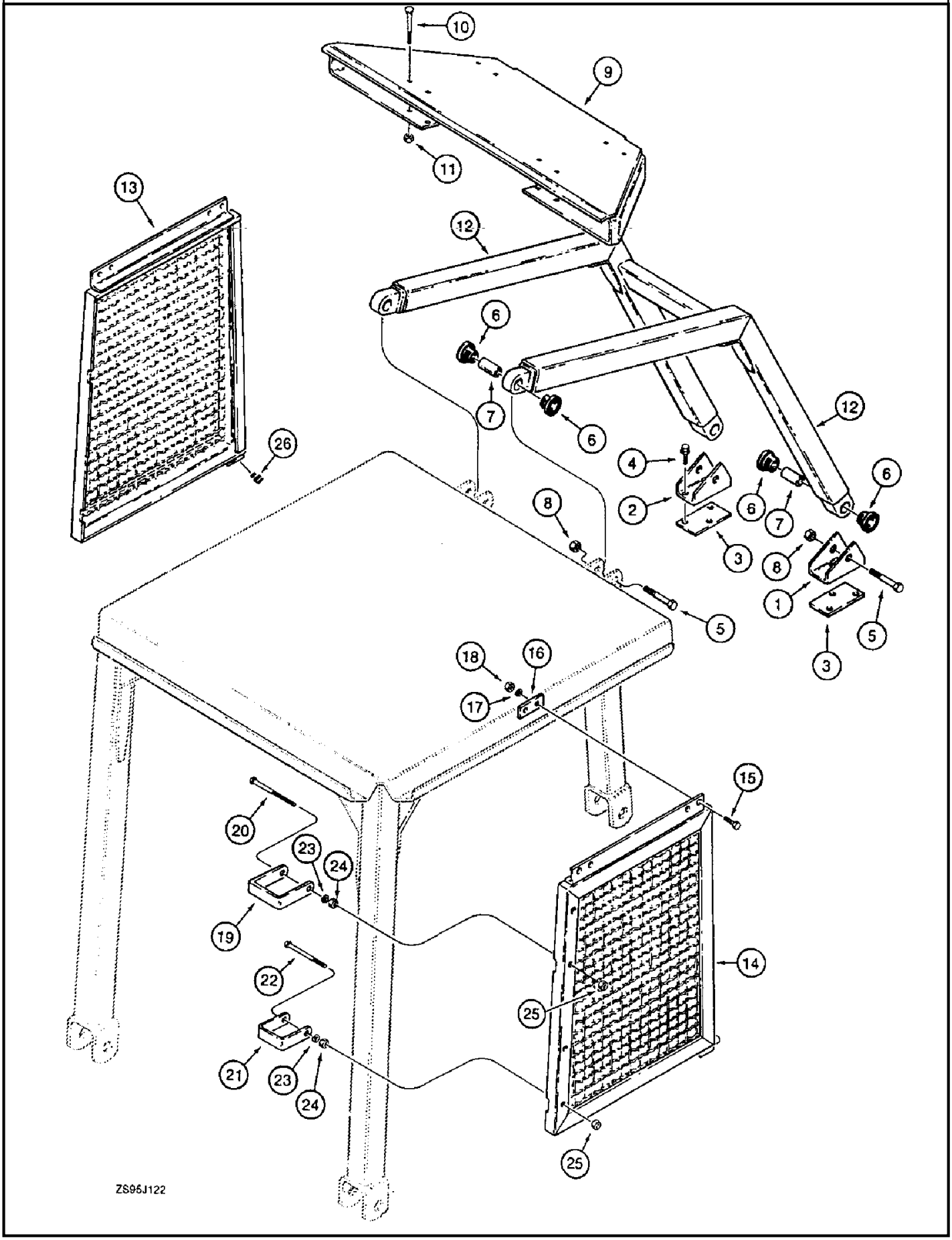
CANOPY SCREENS AND BRUSH GUARD



CANOPY SCREENS AND BRUSH GUARD

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
25		231-1448		4	NUT 1/2"-13, GB - hex, self-locking, 1/2 inch NC
26		R38089		4	CUSHION ASSY. BUMPER - rubber, screen

DECALS

1

2

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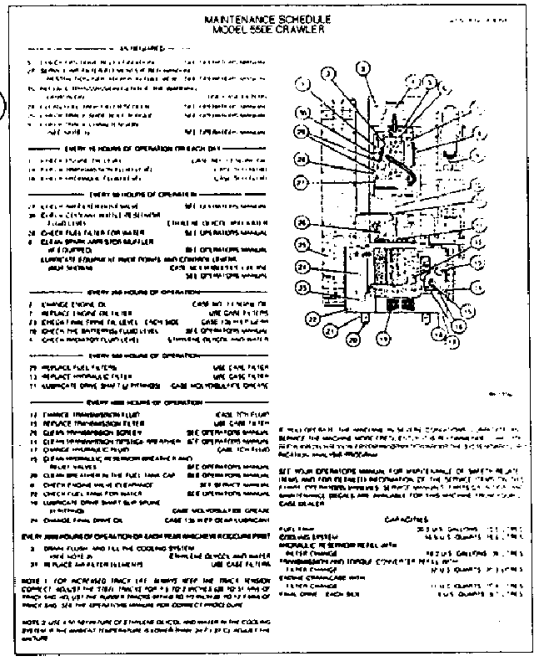
3

4

8



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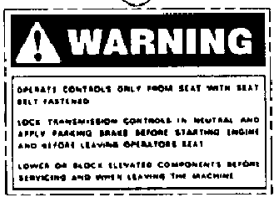
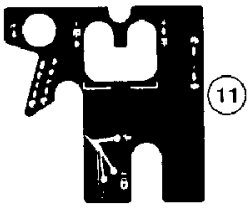

WARNING
OPERATE CONTROLS ONLY FROM SEAT WITH SEAT BELT FASTENED
LOCK TRANSMISSION CONTROLS IN NEUTRAL AND APPLY PARKING BRAKE BEFORE STARTING ENGINE AND BEFORE LEAVING OPERATORS SEAT
LOWER OR BLOCK ELEVATED COMPONENTS BEFORE SERVICING AND WHEN LEAVING THE MACHINE

10

WARNING
BEFORE STARTING ENGINE
STUDY OPERATOR'S MANUAL SAFETY MESSAGES
READ ALL SAFETY SIGNS ON MACHINE
CLEAR THE AREA OF OTHER PERSONS
LEARN & PRACTICE SAFE USE OF CONTROLS BEFORE OPERATING

11



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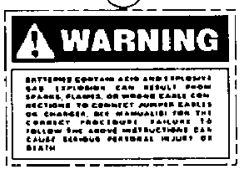

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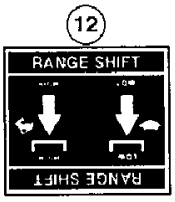
12



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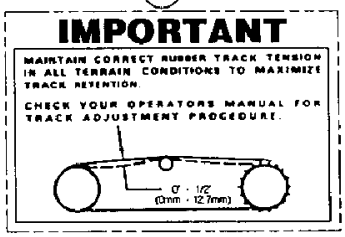
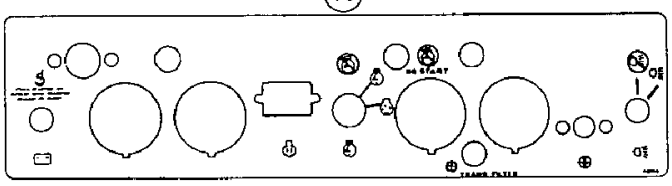
18


IMPORTANT
MAINTAIN CORRECT RUBBER TRACK TENSION IN ALL TERRAIN CONDITIONS TO MAXIMIZE TRACK RETENTION.
CHECK YOUR OPERATORS MANUAL FOR TRACK ADJUSTMENT PROCEDURE.

7

16



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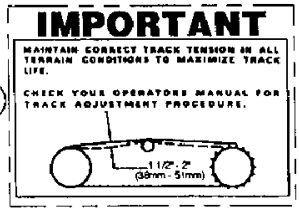

IMPORTANT
MAINTAIN CORRECT TRACK TENSION IN ALL TERRAIN CONDITIONS TO MAXIMIZE TRACK LIFE.
CHECK YOUR OPERATORS MANUAL FOR TRACK ADJUSTMENT PROCEDURE.

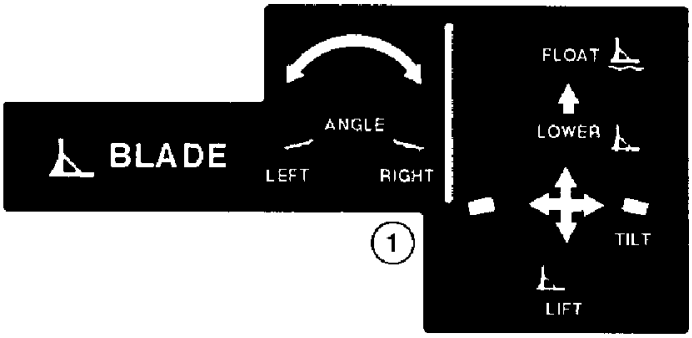
ZS95J123

DECALS

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
	1	102725A1		1	DECAL KIT decals, Includes Ref. 1 through 12 on Figure 9-40.
1		R48483		1	DECAL - Case, with seven treads to the right
2		R48484		1	DECAL - Case, with seven treads to the left
3		R58126		2	DECAL - 550E
4		R56135		2	DECAL - long track
5		R48618		1	DECAL - Case, with five treads on both sides, used on rear cover
6		321-6672		1	DECAL - Warning, check and service cooling system
7		321-3596		3	DECAL - Warning, rotating fan and belts
8		8-80942		1	DECAL - master maintenance schedule
9		321-4188		1	DECAL - Warning, operate controls only from seat
10		321-3705		1	DECAL - Warning, before starting engine
11		R58572		1	DECAL - crawler controls, forward-reverse, neutral start lock and engine speed
12		R58391		1	DECAL - range shift pattern, Range Shift
13		H332536		1	PAD STRIP - anti-skid, not shown
14		321-6714		2	DECAL - Warning, batteries contain acid and explosive gas
15		321-7030		1	WARNING DECAL DECAL, WARNING, Do Not Jump - Use Seat Belt
16		R58270		1	DECAL - instrument panel
17		321-4192		1	DECAL - warning, do not modify ROPS, not shown
18		101313A1		1	DECAL - Important, maintain correct rubber track tension, used with rubber track models only
19		R57776		1	DECAL - Important, maintain correct rubber track tension, used with steel track models only

(1) No longer available, order components

DECALS AND OPERATORS MANUAL BOX



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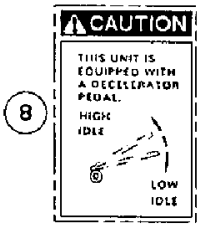

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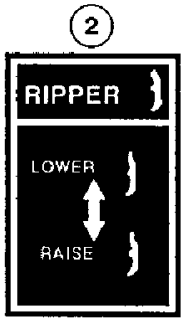

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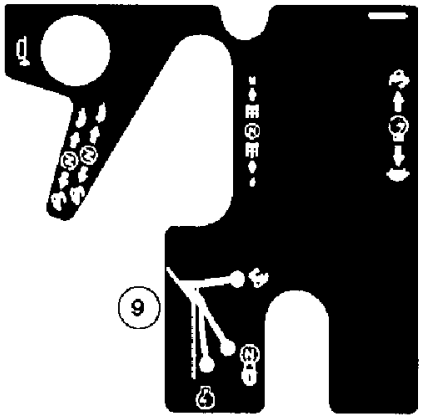

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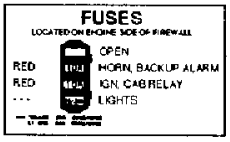

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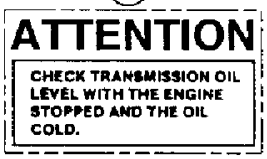

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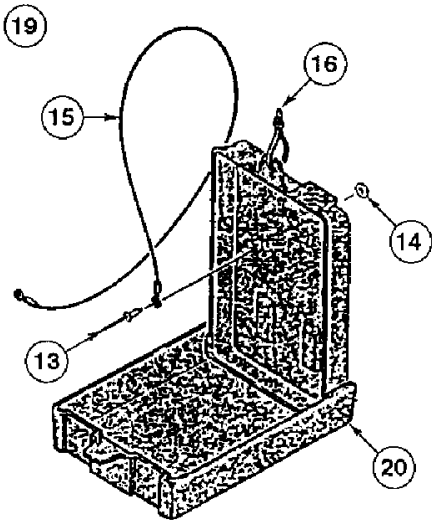

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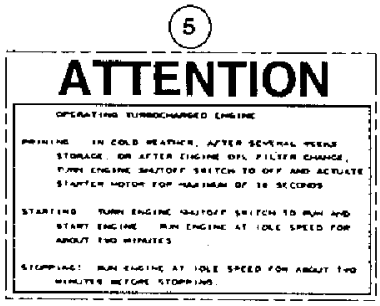

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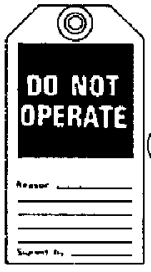

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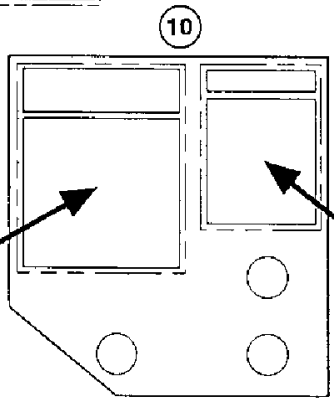

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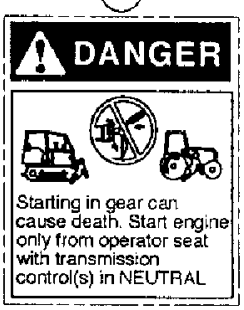

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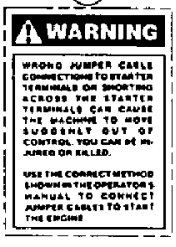

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DECALS AND OPERATORS MANUAL BOX

REF	FN	PART NUMBER	YR/SN	QTY	DESCRIPTION
	1	102725A1		1	DECAL KIT decals, Includes Ref. 1 through 17 on Figure 9-38
1		R58571		1	DECAL - dozer blade control pattern, lift, angle and tilt
2		R58447		1	DECAL - ripper control pattern
3		R50495		1	DECAL - Attention, check the transmission oil level
4		321-4614		1	TAG - do not operate
5		102436A1		1	DECAL - Attention, operating turbocharged engine
7		101759A1		1	DECAL - fuses
8		101638A1		1	DECAL - Caution, this unit is equipped with a decelerator pedal
9		101639A1		1	DECAL - crawler controls, forward-neutral-reverse
10		109697A1		1	PLATE ASSY. PLATE - decal mounting
11		321-7040		1	DANGER DECAL DECAL, DANGER, Starting in gear can cause death (English)
12		321-6872		1	DECAL - warning, wrong jumper cable connections to starter terminals (English)
13		151-522		3	RIVET Pop, 3/16" x .575" - break mandrel, 3/16 x 17/32 inch
14		495-31020		3	WASHER #10 flat (13/64" x 15/32" x 3/64") #10
15		D126821		1	CABLE CORD - manual retaining
16		L18337		1	CABLE TIE 9.95"-12.1" lg STRAP - tie, 15 inch, nylon
17		321-3587		1	DECAL - lift eye identification, if used
18		321-4739		1	EMBLEM - Case, metallic, on grille
19		131-431		2	JAM NUT Self, Threading, 1/4" NUT - push-on type, 1/4 inch, used with item 10 metallic emblem
20		R46464		1	CASE BOX - operators manual
21		124200A1		1	DECAL - track adjustment procedure, used with rubber track models only, not shown

(1) No longer available, order components

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214-1448	2-50		7	218-5065	6-26		15
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218-5182	6-26		33	222-102	3-06		5
218-5182	6-28		33	222-103	3-06		2
218-5182	6-42		21	222-103	3-08		10
218-5213	8-34		8	222-103	3-08		13
218-5213	8-36		9	222-103	3-08		15
218-5219	6-38		25	222-113	3-06		3
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218-5352	6-28		9	222-4976	2-54		11
218-5594	6-38		36	222-4988	2-52		13
218-593	6-26		28	222-4988	2-54		12
218-593	6-28		28	222-500	2-52		8
218-612	8-18		4	222-500	2-54		8
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231-1445	6-46		43	237-6006	7-04		13
231-1446	3-02		2	237-6006	7-04		1A
231-1446	6-38		30	237-6006	7-04		4
231-1446	6-46		3	237-6006	7-04		8
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231-1448	6-52		14	237-6008	6-22		9
231-1448	9-34		12	237-6008	6-26		14
231-1448	9-36		11	237-6008	6-26		31
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231-4116	9-18		36	237-6008	6-28		4
231-4118	2-46		9	237-6008	6-28		43
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231-4218	5-10		11	237-6008	6-38		14
231-5148	4-22		6	237-6008	6-38		17
231-5148	9-10		29	237-6008	6-42		13
231-5344	8-02		28	237-6008	6-42		2
231-5344	9-14		16	237-6008	6-42		20
232-41112	5-02		8	237-6008	7-04		17
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232-4117	9-28		25	237-6010	6-38		11
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237-6004	6-28		10	237-6010	8-12		41
237-6004	6-32		6	237-6010	8-12		5
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237-6012	6-34		25	238-5255	6-04		19
237-6012	6-34		5	238-5324	6-12		9
237-6012	7-04		10	238-5341	2-02		3
237-6012	8-04		21	238-5341	2-38		24
237-6012	8-06		3	238-6016	8-44		3
237-6012	8-34		11	238-6016	8-46		10
237-6012	8-36		12	238-6019	6-04		26
237-6014	8-34		9	238-6022	8-38		20
237-6014	8-36		10	238-6023	8-38		21
237-6016	6-38		24	238-6117	8-34		5
237-6016	6-38		3	238-6117	8-36		6
237-6016	8-04		12	238-6159	8-08		16
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238-5015	8-46		12	276-2446	8-20		10
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321-4739	9-40		18	38-11632	3-02		5
321-6672	9-38		6	38-11632	6-46		5
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326-1288	5-18		3A	396-21041	7-06		6
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32601	6-10		11	41-1616	2-22		8
328-732	9-26		27	41-1616	2-26		8
328-732	9-28		27	411-820	9-14		18
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35665	6-32		3	413-1044	5-02		12
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413-14120	9-06		28	413-632	8-10		14
413-412	2-44		19	413-644	3-02		44
413-412	2-52		4	413-644	6-38		26
413-412	2-54		4	413-648	9-02		16
413-412	4-14		30	413-660	7-02		31
413-412	9-14		23	413-724	2-42		8
413-416	6-46		32	413-812	4-14		41
413-416	9-18		7	413-812	9-06		18
413-420	4-14		26	413-8136	5-10		8
413-420	9-16		26	413-814	9-20		9
413-424	3-02		21	413-816	8-18		8
413-424	6-44		12	413-820	3-04		15
413-510	9-16		29	413-820	5-04		13
413-512	9-26		18	413-820	5-04		19
413-512	9-28		18	413-820	8-02		2
413-518	7-02		28	413-820	9-18		23
413-520	6-46		41	413-820	9-36		15
413-520	9-22		5	413-824	6-50		20
413-524	2-44		13	413-824	8-04		9
413-528	8-14		23	413-824	9-34		8
413-528	9-26		20	413-828	8-02		3
413-528	9-28		20	413-832	9-18		22
413-532	3-02		27	413-836	2-46		5
413-544	8-28		3	413-836	9-06		7
413-610	4-22		13	413-844	8-10		31
413-610	4-26		8	413-844	8-10		9
413-610	6-06		12	413-848	5-02		20
413-610	8-04		28	413-880	9-34		10
413-612	8-30		32	417-512	9-26		17
413-612	8-32		27	417-512	9-28		17
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413-616	2-48		3	425-104	2-54		6
413-616	4-12		7	425-104	3-02		23
413-616	6-06		8	425-104	9-16		28
413-616	9-34		14	425-104	9-18		9
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413-620	6-38		33	425-105	8-28		5
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425-106	4-16		27	425-158	8-32		6
425-106	4-18		21	426-1228	9-10		4
425-106	4-20		6	426-864	6-52		13
425-106	4-30		10	426-888	6-52		20
425-106	6-38		34	427-5094	3-02		15
425-106	6-42		7	427-5094	6-46		53
425-106	6-50		3	427-5094	6-52		4
425-106	8-04		30	427-6106	6-50		17
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425-106	9-02		18	432-612	8-30		37
425-106	9-14		8	432-612	8-32		32
425-106	9-18		20	432-816	7-02		20
425-106	9-34		16	434-820	8-28		7
425-108	3-02		40	438-31224	8-30		28
425-108	4-16		14	438-31224	8-32		23
425-108	4-28		14	440-10616	4-20		14
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492-11038	2-58		17	495-11034	8-30		3
492-11038	3-06		12	495-11034	8-30		36
492-11038	4-02		42	495-11034	8-32		3
492-11038	4-12		8	495-11034	8-32		31
492-11038	4-16		17	495-11034	9-16		15
492-11038	4-16		26	495-11034	9-16		31
492-11038	4-18		20	495-11034	9-22		7
492-11038	4-20		5	495-11034	9-30		55
492-11038	4-22		14	495-11041	4-16		5
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492-11038	6-06		9	495-11041	8-32		29
492-11038	6-38		29	495-11041	9-14		10
492-11038	6-42		6	495-11053	6-52		15
492-11038	8-04		29	495-11053	7-02		19
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492-11038	8-12		12	495-11053	8-30		4
492-11038	8-12		16	495-11053	8-32		4
492-11038	8-12		35	495-11053	9-14		19
492-11038	8-12		39	495-11066	6-50		15
492-11038	8-16		9	495-11066	8-30		30
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492-11038	9-02		17	495-21031	2-44		20
492-11038	9-14		7	495-21031	9-14		24
492-11038	9-18		19	495-21038	2-46		15
492-11038	9-34		15	495-21044	5-04		25
492-11056	3-12		3	495-21044	6-50		4
492-11062	5-02		26	495-21056	8-28		8
492-11062	9-02		27	495-21056	9-18		24
492-11062	9-04		12	495-21063	9-26		26
492-11062	9-04		4	495-21063	9-28		26
492-11062	9-18		29	495-21162	9-02		8
493-11039	4-16		25	495-31016	4-20		8
493-11052	4-16		13	495-31020	9-40		14
493-11052	4-28		12	495-81175	6-32		20
493-21017	4-02		40	496-21041	9-22		15
493-21020	6-44		3	496-21041	9-24		15
493-21052	4-12		44	496-21041	9-34		26
493-21065	4-14		11	496-21053	2-40		7
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496-21053	5-04		20	614-8025	9-24		6
496-21053	5-10		14	614-8030	2-14		2
496-21053	5-10		7	622336C1	6-18		14
496-21053	5-10		9	622336C1	6-18		26
496-21053	6-50		21	622336C1	6-22		14
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515-23159	4-20		7	70-1108	9-18		11
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61-46224	9-04		10	76349	6-10		5
613-10020	4-12		12	76349	7-04		1
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814-8075	2-18		29	892-11005	4-18		10
824-1405	4-18		11	892-11006	4-06		11
825-1410	2-56		27	892-11008	4-18		8
825-1410	4-02		43	892-11008	9-24		7
825-1410	4-06		43	892-11010	2-56		20
825-1410	4-12		14	892-11010	2-56		24
825-1410	4-30		21	892-11010	2-56		3
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A158051	6-12		32	A175806	6-12		40
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A158227	6-12		19	A178367	6-04		23
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A158227	6-16		25	A178460	6-12		26
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A159239	6-12		15	A178706	6-02		1
A159292	6-12		36	A178745	6-04		8
A159292	6-16		18	A183336	6-04		6
A159295	6-12		13	A183452	6-12		27
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A170974	2-48		1	A187917	4-10		11
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A172489	2-56		16	A188194	6-16		8
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A45358	8-08		8	A50110	6-08		23
A45501	9-30		29	A50198	6-18		37
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A46948	4-02		2	A50199	6-18		37
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A77468	2-36		11	D123205	4-28		7
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A77475	2-30		13	D137627	6-02		11A
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J900956	2-26		7	J903740	2-08		9
J900958	2-22		9	J903744	2-26		19
J900958	2-26		9	J903745	2-08		12
J900967	2-22		2	J903757	2-16		9
J900967	2-26		2	J903794	2-04		1
J901049	2-14		6	J903857	2-30		8
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J901097	2-38		3	J904166	2-36		7
J901223	2-06		1	J904217	2-22		4
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J901919	2-06		9	J904374	3-08		1
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J905363	3-08		14	J909670	2-22		30
J905364	3-08		9	J909695	3-08		18
J905375	3-08		12	J910248	2-32		6
J905387	3-12		27	J910517	2-22		33
J905417	2-08		6	J910739	2-02		10
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J905443	2-06		2	J910811	2-18		21
J905443	2-38		5	J910814	2-18		18
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